Contents

Number 1 July 1994

President's Page

Put Our Patients First 1
Benson R. Wilcox, MD

Editorials

Put Our Patients First! 2
Harold C. Urschel, Jr, MD

Exclusive Contracts Raise Serious Professional Concerns 4
Raj B. Lal, MD

Warm Cardioplegia or Aerobic Cardioplegia? Let's Call a Spade a Spade 5
Philippe Menasché, MD, PhD

Original Articles

Forty-Hour Preservation of the Rabbit Heart: Optimal Osmolarity, [Mg^{2+}], and pH of a Modified UW Solution 7
James C. Stringham, MD, Karen L. Paulsen, BS, James H. Southard, PhD, Robert M. Mentzer, Jr, MD, and Folkert O. Belzer, MD

Pediatric and Adult Thoracic Trauma: Age-Related Impact on Presentation and Outcome 14
Richard J. Peterson, MD, Joseph J. Tepas III, MD, Fred H. Edwards, MD, Niranjan Kissoon, MBBS, Pam Pieper, ARNP-CS MSN, and Eric L. Ceithaml, MD

Graft Replacement of the Descending Thoracic Aorta: Results of "Open" Distal Anastomosis 19
Scott A. Scheinin, MD, and Denton A. Cooley, MD

Aggressive Multimodality Therapy for Malignant Pleural Mesothelioma 24
Thomas W. Rice, MD, David J. Adelstein, MD, Thomas J. Kirby, MD, Matthew G. Saltarelli, MD, Siva R. Murthy, MD, Marjorie A. Van Kirk, RN, Herbert P. Wiedemann, MD, and James K. Weick, MD

The Clamshell Incision: An Improved Approach to Bilateral Pulmonary and Mediastinal Tumor 30
Manjit S. Bains, MD, Robert J. Ginsberg, MD, William G. Jones II, MD, Patricia M. McCormack, MD, Valerie W. Rusch, MD, Michael E. Burt, MD, PhD, and Nael Martini, MD

Experimental Large-Animal Model of Obliterative Bronchiolitis After Lung Transplantation 34
Ghannam A. Al-Dossari, MD, Vibhu R. Kshettry, MD, Jose Jessurun, MD, and R. Morton Bolman III, MD

Intermittent Antegrade Warm Versus Cold Blood Cardioplegia: A Prospective, Randomized Study 41

L. Conrad Pelletier, MD, Michel Carrier, MD, Yves Leclerc, MD, Raymond Cartier, MD, Eva Wesolowska, MD, and B. Charles Solymoss, MD

Pentoxifylline Reduces Lung Allograft Reperfusion Injury 50

Kan Okabayashi, MD, Motoi Aoe, MD, Steven R. DeMeester, MD, Joel D. Cooper, MD, and G. Alexander Patterson, MD

Critical Pathway Methodology: Effectiveness in Congenital Heart Surgery 57

Kevin Turley, MD, Michael Tyndall, MD, Claude Roge, MD, Michael Cooper, MD, Kerry Turley, RN, MPA, Michael Applebaum, MD, and Harold Tarnoff, MD

Antireflux Operations in Patients With Scleroderma 66

Nancy Claire Poirier, MD, Raymond Taillefer, MD, Philippe Topart, MD, and André Duranceau, MD

Five-Year Follow-up of Microsurgical Multiple Internal Thoracic Artery Grafts 74

George E. Green, MD, Airlie Cameron, MD, Amit Goyal, MD, Shing-Chiu Wong, MD, and Jaqueline Schwanede, MD

Cardiac Reoperation in Patients With Bilateral Internal Thoracic Artery Grafts 80

Frederic S. Joyce, MD, Patrick M. McCarthy, MD, Paul C. Taylor, MD, Delos M. Cosgrove III, MD, and Bruce W. Lytle, MD

Mechanisms of Coronary Vasomotor Dysfunction in the Transplanted Heart 86

David A. Fullerton, MD, Max B. Mitchell, MD, Robert C. McIntyre, Jr, MD, James M. Brown, MD, Xianzhong Meng, MD, David N. Campbell, MD, and Frederick L. Grover, MD

Effect of Pulsatile Flow During Cardiopulmonary Bypass on Thyroid Hormone Metabolism 93

Suat Buket, MD, Alp Alayunt, MD, Mustafa Ozbaran, MD, Ahmet Hamulu, MD, Berent Discigil, MD, Bulent Cetindag, MD, Hayal Ozkilic, MD, Zehra Balkan, MD, Onol Bilkay, MD, and Isa Durmaz, MD

Transatrial Lead Placement for Endocardial Pacing in Children 97

Mark H. Hoyer, MD, Lee B. Beerman, MD, Jose A. Ettedgui, MD, Sang C. Park, MD, Pedro J. del Nido, MD, and Ralph D. Siewers, MD

Surgical Treatment of Wolff-Parkinson-White Syndrome in Infants and Children 103

Takuro Misaki, MD, Go Watanabe, MD, Takashi Iwa, MD, Yasuhiro Matsunaga, MD, Hiroshi Ohtake, MD, Makoto Tsubota, MD, Masao Takahashi, MD, and Yoh Watanabe, MD

Prevention and Management of Strictures After Hypopharyngocolostomy or Esophagocolostomy 108

Ming-Ho Wu, MD, Wu-Wei Lai, MD, Mu-Yen Lin, MD, and Nan-Song Chou, MD

Effect of Altering Cerebrospinal Fluid Pressure on Spinal Cord Blood Flow 112

Shigeru Kazama, MD, Yoshihiko Masaki, BS, Shigeyoshi Maruyama, BS, and Akira Ishihara, MD

Spinal Cord Protection: Development of a Paraplegia-Preventive Solution 116

Tetsuya Ueno, MD, Koujirou Furukawa, MD, Yuuji Katayama, MD, Hisao Suda, MD, and Tsuyoshi Itoh, MD

Acute Impairment of Coronary Blood Flow by Dynamic Cardiomyoplasty 121

Ernesto R. Soltero, MD, Donald H. Glaeser, DSc, Lloyd H. Michael, PhD, Craig J. Hartley, PhD, Nan R. Earle, BS, and Gerald M. Lawrie, MD

Long-Term Effects of Dynamic Aortomyoplasty 128

Juan-Carlos Chachques, MD, PhD, François Haab, MD, Christophe Cron, MD, Edmundo Cabrera Fischer, MD, Pierre Grandjean, MS, Patrick Bruneval, MD, Christophe Acar, MD, Victor A. Jebara, MD, Fabrice Fontaliran, MD, and Alain F. Carpentier, MD, PhD

Ultrasonic Assessment of Internal Thoracic Artery Graft Flow in the Revascularized Heart 135

Charles C. Canver, MD, and Norman A. Dame, CCP

Determination of Organ Blood Flows During Retrograde Inferior Vena Caval Perfusion 139

Keiji Oohara, MD, Akihiko Usui, MD, Minoru Tanaka, MD, Toshio Abe, MD, and Mitsuya Murase, MD

Effects of Aprotinin on Acute Recovery of Cerebral Metabolism in Piglets After Hypothermic Circulatory Arrest 146

Mitsuru Aoki, MD, Richard A. Jonas, MD, Fumikazu Nomura, MD, Michael E. Stromski, PhD, Miles K. Tsuji, MD, Paul R. Hickey, MD, and David H. Holtzman, MD, PhD

Valvuloplasty for Common Atrioventricular Valve Regurgitation in Cyanotic Heart Diseases 154

Katsuhiko Tatsuno, MD, Kiyoshi Suzuki, MD, Toshio Kikuchi, MD, Yukihiro Takahashi, MD, Yasuo Murakami, MD, and Katsuhiko Mori, MD

Interobserver Variability and Accuracy of Computed Tomographic Assessment of Nodal Status in Lung Cancer 158

Ewald C. M. Bollen, MD, Reginald Goei, MD, PhD, Bep E. v. 't Hof-Grootenboer, BSc, Cees W. M. Versteege, MD, Harry A. Engelshove, MD, and Rob J. S. Lamers, MD

Intraatrial Insertion of a Mitral Prosthesis in a Destroyed or Calcified Mitral Annulus 163

Patrick Nataf, MD, Alain Pavie, MD, Frederique Jault, MD, Valeria Bors, MD, Christian Cabrol, MD, and Iradj Gandjbakhch, MD

Thrombotic Obstruction of Bileaflet Valves: Surgical Management and Fiberoptic Thrombectomy 168

Zohair Al-Halees, FRCSC, and Naresh Kumar, FRCS

Changes in the Antioxidative Defensive System During Open Heart Operations in Humans 170

Ki-Bong Kim, MD, Hyoung Hwa Chung, MD, Myung Suk Kim, MD, and Joon Ryang Rho, MD

Mediastinoscopy as a Routine Outpatient Procedure 176

Irene J. Cybulsky, MD, and W. Frederick Bennett, MD

Transsternal Repair of Coarctation and Associated Cardiac Defects 179

Serafin Y. DeLeon, MD, Francis X. Downey, MD, Norbert E. Baumgartner, MD, E. Phillip Ow, MD, Jose A. Quinones, MD, Ludgerio Torres, MD, Michel N. Ilbawi, MD, and Roque Pifarré, MD

Composite Arterial Conduits for a Wider Arterial Myocardial Revascularization 185

Antonio M. Calafiore, MD, Gabriele Di Giammarco, MD, Nicola Luciani, MD, Nicola Maddestra, MD, Ernesto Di Nardo, MD, and Romeo Angelini, MD

Coronary Artery Endothelial Dysfunction After Global Ischemia, Blood Cardioplegia, and Reperfusion 191

Katsuhiko Nakanishi, MD, Zhi-Qing Zhao, MD, PhD, Jakob Vinten-Johansen, PhD, Jon C. Lewis, PhD, D. Scott McGee, BS, and John W. Hammon, Jr, MD

Adenosine and AICA-Riboside Fail to Enhance Microvascular Endothelial Preservation 200

Frank W. Sellke, MD, Menachem Friedman, MD, Steven Y. Wang, MD, PhD, Robert N. Piana, MD, Hai Bin Dai, MD, and Robert G. Johnson, MD

Endothelial Function and Vasodilator Profile of the Inferior Epigastric Artery 207

Samad Tadjkarimi, MD, Adrian H. Chester, PhD, Julie AA. Borland, BN, Catherine J. Schyns, Gregory S. O'Neil, PhD, and Magdi H. Yacoub, FRCS

Current Surgical Management of Tetralogy of Fallot 211

Vaughn A. Starnes, MD, Giovanni Battista Luciani, MD, David A. Latter, MD, and Michael L. Griffin, MD

Predictive Value of Blood Clotting Tests in Cardiac Surgical Patients 216

Glenn P. Gravlee, MD, Sunil Arora, MD, Sidney W. Lavender, PAC, Stephen A. Mills, MD, Allen S. Hudspeth, MD, A. Robert Cordell, MD, Robert L. James, MS, Joni K. Brockschmidt, MS, and John J. Stuart, MD

Fiberoptic Cardioscopy Under Cardiopulmonary Bypass: Potential for Cardioscopic Surgery? 222

Malcolm E. Legget, MB, ChB, and David P. Shaw, MB, ChB

Case Reports

Strangulated Parahiatal Hernia: Not Just Another Paraesophageal Hernia 226

Todd L. Demmy, MD, Theresa M. Boley, RN-C, MSN, and Jack J. Curtis, MD

Coarctation Developing After Arterial Switch Repair for Transposition of the Great Arteries 227

Han J. G. H. Mulder, MD, Gilles L. Kaan, MD, Aagje Nijveld, MD, Anton van Oort, MD, Jelle Barentsz, MD, and Leon K. Lacquet, MD

Management of a Tracheal Bronchus in a Pediatric Lung Transplant Recipient 229

Mitchell J. Magee, MD, Bartley P. Griffith, MD, and John M. Armitage, MD

New Modification of the Damus-Kaye-Stansel Operation 231

Shuichi Matsuno, MD, Yoshio Yokota, MD, Fumitaka Ando, MD, Fumio Okamoto, MD, Akira Shimizu, MD, Shogo Nakayama, MD, Tadashi Ikeda, MD, Shigehiro Ohtani, MD, Katsushi Oda, MD, Yosuke Murakami, MD, and Seichiro Makino, MD

Pericardiectomy Using an Ultrasonic Dissector 233

Mathew Ninan, FRCS(Ed), and Tom Treasure, FRCS

Transesophageal Echocardiography in the Postoperative Child With an Open Sternum 235

Barry Marcus, MD, Pierre C. Wong, MD, Winfield J. Wells, MD, George G. Lindesmith, MD, and Vaughn A. Starnes, MD

Mycotic Aneurysm of the Ascending Aorta After Coronary Revascularization 236

Fabrizio M. Follis, MD, Ralph F. Paone, MD, and Jorge A. Wernly, MD

Successful Resection of Giant Intrapericardial Lipoma 238

Loïc Lang-Lazdunski, MD, Mohammad Oroudji, MD, Yves Pansard, MD, Christiane Vissuzaine, MD, and Ulrik Hvass, MD

Management of Acute Aortic Dissection Associated With Coarctation by a Single Operation 241

Lars G. Svensson, MD, PhD

Posterior Mediastinal Endodermal Sinus (Yolk Sac) Tumor in a Female Patient 244

Takaaki Konishi, MD, Shozo Fujino, MD, Yoshihide Chino, MD, Yoshikuni Asada, MD, Shoji Asakura, MD, Hirofumi Kato, MD, Atsumi Mori, MD, and Hidetoshi Okabe, MD

New Procedure to Replace the Aortic Valve With Autologous Pericardium: A Clinical Case 245

Michel Aupart, MD, Yvon Meurisse, MD, Xavier Dreyfus, MD, Franck Diemont, MD, Agnes Sirinelli, MD, and Michel Marchand, MD

Defibrillator Twiddler's Syndrome 247

Lary A. Robinson, MD, and John R. Windle, MD

Limbic Encephalitis Secondary to Malignant Thymoma 250

John D. Cunningham, MD, and Michael E. Burt, MD, PhD

How to Do It

The Aortic Bodice: A Life-Saving Maneuver 252

Juan A. Sanchez, MD, John A. Elefteriades, MD, and Graeme L. Hammond, MD

Transhiatal Stapled Esophagojejunostomy Without a Pursestring Suture in Patients With Previous Gastric Resection 254

R. Douglas Adams, MD, Keith B. Allen, MD, Keith Millikan, MD, Alexander Doolas, MD, and L. Penfield Faber, MD

Technique for Removal of Left Ventricular Assist Devices 257

Mehmet C. Oz, MD, Howard R. Levin, MD, and Eric A. Rose, MD

Simplified, Standardized Technique for Cervical Esophagogastric Anastomosis 259

Christopher D. Stone, MD, and Richard F. Heitmiller, MD

Collective Review

Primary Chylopericardium 262

Hideki Akamatsu, MD, Jun Amano, MD, Tohru Sakamoto, MD, PhD, and Akio Suzuki, MD

Key References

Fibrothorax and Decortication 267

Jean Deslauriers, MD, and Louis P. Perrault, MD

Update

Delivery of Intraoperative Radiation Therapy After Pneumonectomy: Experimental Observations and Early Clinical Results 269

Harvey I. Pass, MD

Report

Definitions of Terms of The Society of Thoracic Surgeons National Cardiac Surgery Database 271

Correspondence

Put Patients First 274

Harold C. Urschel, Jr, MD

Natural Killer Cell Activity After Cardiopulmonary Bypass 274

Dao M. Nguyen, MD, David S. Mulder, MD, and Hani Shennib, MD

Reply

Kazuyoshi Tajima, MD, and Fumio Yamamoto, MD

Reply

John Butler, FRCSI, Graeme M. Rocker, DM, and Stephen Westaby, MS

Vanishing Posttraumatic Left Ventricular Outflow Tract Thrombi 276

Jean G. Dumesnil, MD, Salvatore Lentini, MD, and Denis Desaulniers, MD

Donor Lung Procurement 276

Ahmed El-Gamel, FRCS, Nizar A. Yonan, FRCS, Ali N. Rahman, FRCS, Abdul K. Deiraniya, FRCS, and Colin S. Campbell, FRCS

Reply

Sudhir Sundaresan, MD

Subclavian Venipuncture: A Reliable Technique 277

Sadanori Takeo, MD, Souichirou Maekawa, MD, and Masato Furuyama, MD

Constricted Varicose Veins for CABG 279

Victor Parsonnet, MD

Reply

Anton Moritz, MD

Alternative Technique for Cardiomyoplasty 279

Reida M. El Oakley, FRCS, and Jonathan Jarvis, PhD

Review of Recent Books

Anticoagulation, Hemostasis, and Blood Preservation in Cardiovascular Surgery, edited by Roque Pifarre, MD 221

Renee S. Hartz, MD

Surgery for Congenital Heart Defects, second edition, by J. Stark, MD, and M. de Leval, MD 253

Ross M. Ungerleider, MD

Announcements

Information for Authors A-29, 30

Guidelines for the Submission of Electronic Manuscripts A-31

Forthcoming Articles A-32

Events of Interest A-33, 34

The Society of Thoracic Surgeons: Thirty-first Annual Meeting 18

Important Notice From the Southern Thoracic Surgical Association 49

Notice From the American Board of Thoracic Surgery 107, 270

Notice From the Thoracic Surgery Foundation for Research and Education 134

Preparing Your Practice for Change: Thoracic Surgery Into the Next Decade 190

The Third International Conference on Circulatory Support Devices for Severe Cardiac Failure 268

Program of the Third International Conference on Circulatory Support Devices for Severe Cardiac Failure 281

Call for Abstracts, The Society of Thoracic Surgeons A-35, 36

Classified Advertisements A-37, 38

Index to Advertisers A-40

Number 2 August 1994

Editorials

Surface-Bound Heparin—Panacea or Peril? 285

L. Henry Edmunds, Jr, MD

Thoracic Outlet Syndrome 287

Susan E. Mackinnon, MD

Original Articles

Neoadjuvant Therapy: A Novel and Effective Treatment for Stage IIIb Non–Small Cell Lung Cancer 290

Valerie W. Rusch, MD, Kathy S. Albain, MD, John J. Crowley, PhD, Thomas W. Rice, MD, Vassyl Lonchyna, MD, Robert McKenna, Jr, MD, Keith Stelzer, MD, Robert B. Livingston, MD, and the Southwest Oncology Group

Single-Clamp Technique: An Important Adjunct to Myocardial and Cerebral Protection in Coronary Operations 296

Sary F. Aranki, MD, Robert J. Rizzo, MD, David H. Adams, MD, Gregory S. Couper, MD, Nancy M. Kinchla, BS, Jennifer S. Gildea, BS, and Lawrence H. Cohn, MD

Aortic Valve Repair With Fibrin Glue for Type A Acute Aortic Dissection 304

Jacques R. Séguin, MD, PhD, Eric Picard, MD, Jean-Marc Frapier, MD, and Paul-André Chaptal, MD

Mammary Artery Versus Saphenous Vein Grafts: Assessment of Basic Fibroblast Growth Factor Receptors 308

Hiep C. Nguyen, MD, Eugene A. Grossi, MD, Martin LeBoutillier III, MD, Bryan M. Steinberg, MD, Daniel B. Rifkin, PhD, F. Gregory Baumann, PhD, Stephen B. Colvin, MD, and Aubrey C. Galloway, MD

Dextrorphan Inhibits the Release of Excitatory Amino Acids During Spinal Cord Ischemia 312

Chris K. Rokkas, MD, Loring S. Helfrich, Jr, BS, Douglas C. Lobner, PhD, Dennis W. Choi, MD, PhD, and Nicholas T. Kouchoukos, MD

Nonthoracotomy Defibrillator Implantation: A Single-Center Experience With 200 Patients 321

Dieter Hammel, MD, Hans H. Scheld, MD, Michael Block, MD, and Günter Breithardt, MD

Isolated Single-Lung Perfusion With TNF-α in a Rat Sarcoma Lung Metastases Model 328

Benny Weksler, MD, David Blumberg, MD, Jeffrey T. Lenert, MD, Bruce Ng, BS, Yuman Fong, MD, and Michael E. Burt, MD, PhD

Thoracotomy for Pulmonary Mycoses in Non–HIV-Immunosuppressed Patients 333

Barbara K. Temeck, MD, David J. Venzon, PhD, Christopher A. Moskaluk, MD, PhD, and Harvey I. Pass, MD

Downsizing of Valve Allografts for Use as Right Heart Conduits 339

Takeshi Hiramatsu, MD, Takuya Miura, MD, Joseph M. Forbess, MD, Christian Brizard, MD, and Richard A. Jonas, MD

Pilot Study of the Efficacy of a Thrombin Inhibitor for Use During Cardiopulmonary Bypass 344

Abe DeAnda, Jr, MD, Steven E. Coutre, MD, Marc R. Moon, MD, Conrad M. Vial, BA, Linda C. Griffin, PhD, Veronica S. Law, BA, Masashi Komeda, MD, Lawrence L. K. Leung, MD, and D. Craig Miller, MD

Effect of Postcardioplegia Reperfusion Rhythm on Myocardial Blood Flow 351

William L. Holman, MD, Walter V. A. Vicente, MD, PhD, Russell D. Spruell, BSEE, Stanley B. Digerness, PhD, and Albert D. Pacifico, MD

Reoperative Coronary Grafting: Changing Patient Profiles, Operative Indications, Techniques, and Results 359

Cary W. Akins, MD, Mortimer J. Buckley, MD, Willard M. Daggett, MD, Alan D. Hilgenberg, MD, Gus J. Vlahakes, MD, David F. Torchiana, MD, and W. Gerald Austen, MD

Dynamic Descending Thoracic Aortomyoplasty: Comparison With Intraaortic Balloon Pump in a Model of Heart Failure 366

Robert R. Lazzara, MD, Dennis R. Trumble, MS, and James A. Magovern, MD

Video-Assisted Thoracoscopic Surgery Versus Thoracotomy for Spontaneous Pneumothorax 372

David A. Waller, FRCS, Jonathan Forty, FRCS, and Graham N. Morritt, FRCS

Interaction of Age and Coronary Disease After Valve Replacement: Implications for Valve Selection 378

Ellis L. Jones, MD, William S. Weintraub, MD, Joseph M. Craver, MD, Robert A. Guyton, MD, and Yannan Shen, MS

Repair of Insufficient Bicuspid Aortic Valves 386

Charles D. Fraser, Jr, MD, Nan Wang, MD, Roger B. B. Mee, FRACS, Bruce W. Lytle, MD, Patrick M. McCarthy, MD, Shelly K. Sapp, MS, Eliot R. Rosenkranz, MD, and Delos M. Cosgrove III, MD

Risk and Benefit of Low Systemic Heparinization During Open Heart Operations 391

Ludwig K. von Segesser, MD, Branko M. Weiss, MD, Miralem Pasic, MD, Eligio Garcia, BA, and Marko I. Turina, MD

Operative Risk Factors and Durability of Repair of Coarctation of the Aorta in the Neonate 399

Walter H. Merrill, MD, Steven J. Hoff, MD, James R. Stewart, MD, Charles C. Elkins, MD, Thomas P. Graham, Jr, MD, and Harvey W. Bender, Jr, MD

Hemodynamic Effects of Carbon Dioxide Insufflation During Thoracoscopy 404

Rebecca S. Wolfer, MD, Mark J. Krasna, MD, Jawad U. Hasnain, MD, and Joseph S. McLaughlin, MD

Orotic Acid Improves Left Ventricular Recovery Four Days After Heterotopic Transplantation 409

Thomas Yeh, Jr, MD, Ivan M. Rebeyka, MD, Emma R. Jakoi, PhD, Danna E. Johnson, MD, Rebecca J. Dignan, MD, Cornelius M. Dyke, MD, and Andrew S. Wechsler, MD

Pulmonary Vascular Resistance Related to Endothelial Function After Lung Transplantation 416

Per Ola Kimblad, MD, PhD, Trygve Sjöberg, PhD, and Stig Steen, MD, PhD

Complement Activation During Cardiopulmonary Bypass: Effects of Immobilized Heparin 421

Marcela Pekna, MD, PhD, Leif Hagman, MD, Eric Haldén, MD, PhD, Ulf R. Nilsson, MD, PhD, Bo Nilsson, MD, PhD, and Stefan Thelin, MD, PhD

Surgical Treatment of Infected Composite Graft After Replacement of Ascending Aorta 425

Robert Soyer, MD, Jean Paul Bessou, MD, François Bouchart, MD, Michel Redonnet, MD, Dominique Mouton-Schleifer, MD, and Jean Arrignon, MD

Infective Endocarditis in Patients Who Had Replacement of the Aortic Root 429

Anthony Ralph-Edwards, MD, Tirone E. David, MD, and Joanne Bos, RN

Should Thyroid Function Be Assessed Before Cardiopulmonary Bypass Operations? 434

T. Hugh Jones, MD, Steven M. Hunter, MD, Alun Price, MSc, and Gianni D. Angelini, MD

Perioperative Histologic and Ultrastructural Changes in the Pericardium and Adhesions 437

Udim U. Nkere, FRCSE, Simon A. Whawell, PhD, Catherine E. Serraf, PhD, John B. Schofield, MRCPath, Jeremy N. Thompson, FRCS, and Kenneth M. Taylor, FRCS

Ten-Year Experience of Cardiac Surgery in Patients Aged 80 Years and Over 445

Tsung-Po Tsai, MD, Aurelio Chaux, MD, Jack M. Matloff, MD, Robert M. Kass, MD, Richard J. Gray, MD, Michele A. DeRobertis, RN, and Steven S. Khan, MD

Mitral Valve Remodeling Using Autologous Pericardium: An Experimental Study 452

Andreas Borowski, MD, Michael Südkamp, MD, Ernst Rainer de Vivie, MD, and Harald Korb, MD

Results of Upper Plexus Thoracic Outlet Syndrome Operation 458

Virchel E. Wood, MD, and David W. Ellison, MD

Thrombolysis in Left-Sided Prosthetic Valve Occlusion: Immediate and Follow-up Results 462

N. Krishna Reddy, DM, T. N. C. Padmanabhan, DM, Shailender Singh, DM, D. Nirmal Kumar, DM, P. Raghava Raju, DM, Ponangi Venkata Satyanarayana, MCh, D. Prasada Rao, MCh, Prabhala Rajagopal, MCh, and B. Soma Raju, DM

Reduced Complement and Granulocyte Activation With Heparin-Coated Cardiopulmonary Bypass 472

Erik Fosse, MD, PhD, Oddvar Moen, MD, Egil Johnson, MD, PhD, Gudmund Semb, MD, Vibeke Brockmeier, MD, Tom Eirik Mollnes, MD, PhD, Magne K. Fagerhol, MD, PhD, and Per Venge, MD, PhD

Effect of Cardiopulmonary Bypass on the Circulating Level of Soluble GMP-140 478

Hiroyoshi Komai, MD, and Sheila G. Haworth, FRCP

Atrial Myxoma: Report of 24 Operations Using the Biatrial Approach 483

Sami S. Kabbani, MD, Mufid Jokhadar, MD, Riad Meada, MD, Hisham Jamil, MD, Fadi Abdun, MD, Aref Sandouk, MD, and Fawzi Nabhani, MD

Protective Effects of Various Preservation Solutions on Cultured Endothelial Cells 489

Thomas Eberl, MD, Thomas Schmid, MD, Paul Hengster, MD, Ralph Wödlinger, MD, Georg Oberhuber, MD, Helmut Weiss, MD, Manfred Herold, MD, PhD, Ferdinand Waldenberger, MD, and Raimund Margreiter, MD

A Short Course of FK506 Can Induce Limited Donor-Specific Graft Acceptance 496

Takashi Hirai, MD, Thomas K. Waddell, MD, Kleber N. DeCampos, MD, Christopher G. Compeau, MD, Hiromi Wada, MD, Shigeki Hitomi, MD, G. Alexander Patterson, MD, and Arthur S. Slutsky, MD

Autotransfusion: Is There a Benefit in a Current Practice of Aggressive Blood Conservation? 502

James J. Morris, MD, and Yong Seng Tan, MD

Surgical Timing in Aortic Regurgitation: Left Ventricular Function Analysis by Contractility Score 509

Pietro Di Biasi, MD, Antonella Pajé, MD, Maurizio Salati, MD, Giorgio Bozzi, MD, Maurizio Viecca, MD, Alessandro Cialfi, MD, Maurizio Di Biasi, MD, Stefano Guzzetti, MD, and Carmine Santoli, MD

Coronary Artery Operation Supported by the Hemopump: An Experimental Study on Pig 516

Urban Lönn, MD, Bengt Peterzén, MD, Hans Granfeldt, MD, and Henrik Casimir-Ahn, MD, PhD

Coronary Artery Operation With Support of the Hemopump Cardiac Assist System 519

Urban Lönn, MD, Bengt Peterzén, MD, Hans Granfeldt, MD, and Henrik Casimir-Ahn, MD, PhD

Renal Impairment After Thoracotomy: Incidence, Risk Factors, and Significance 524

Jonathan Golledge, FRCS, and Peter Goldstraw, FRCS

Greater Contractility of Internal Mammary Artery Bifurcation: Possible Cause of Low Patency Rates 529

Guo-Wei He, MD, PhD, William H. Ryan, MD, Tea E. Acuff, MD, Cheng-Qin Yang, MD, and Michael J. Mack, MD

Experimental Comparison of Manually Inflatable Versus Autoinflatable Retrograde Cardioplegia Catheters 533

Philippe Menasché, MD, PhD

Spark Erosion Myectomy in Hypertrophic Obstructive Cardiomyopathy 536

Lex P. W. M. Maat, MD, Cornelis J. Slager, MSc, Lex A. van Herwerden, MD, Johan C. H. Schuurbiers, BSc, Robert J. van Suylen, MD, Marcel J. M. Kofflard, MD, Folkert J. ten Cate, MD, and Egbert Bos, MD

Case Reports

Intracardiac Thrombus: A Risk of Incomplete Anticoagulation for Cardiac Operations 541

Albert T. Cheung, MD, Serle K. Levin, MD, Stuart J. Weiss, MD, PhD, Michael A. Acker, MD, and Nina Stenach, CCP

Primary Repair of Aortopulmonary Septal Defect, Interrupted Aortic Arch, and Anomalous Origin of the Right Pulmonary Artery 543

Redmond P. Burke, MD, and Howard M. Rosenfeld, MD

Benign Mediastinal Teratoma Masquerading as a Large Multiloculated Effusion 545

Lary A. Robinson, MD, Layton F. Rikkers, MD, and John R. Dobson, MD

Management of Difficult Coronary Sinus Rupture 548

Steven J. Weiss, MD

Bilateral Pancoast Syndrome in a Patient With Metachronous Primary Lung Cancer 550

Federico Rea, MD, Carla Mazzucco, MD, Cristiano Breda, MD, Davide Fiore, MD, and Francesco Sartori, MD

Clinical Implantation of the Wearable Baxter Novacor Ventricular Assist System 551

Daniel Y. Loisance, MD, Philippe H. Deleuze, MD, Jean-Philippe Mazzucotelli, MD, Paul Le Besnerais, MD, and Jean-Luc Dubois-Rande, MD

Revascularization of the Ischemic Colon Transplant Using the Internal Mammary Vessels 555

Si Chan Sung, MD, Ill Young Chung, MD, Hee Jae Jun, MD, Pill Jo Choi, MD, Jong Soo Woo, MD, and Hee Chang Ahn, MD

Staged Repair Using Omentum for Posttraumatic Aortoesophageal Fistula 557

Nan Wang, MD, Steven R. Sparks, MD, and Leonard L. Bailey, MD

Blunt Traumatic Rupture of the Right Hemidiaphragm and Budd-Chiari Syndrome 559

Angel L. Fernández-González, MD, Rafael Llorens, MD, Jesús M. Herreros, MD, Jorge Cato, MD, Francisco Lecumberri, MD, and Jesús Longo, MD

Carney's Complex in Association With Right Atrial Myxoma 561

Shoh Tatebe, MD, Hajime Ohzeki, MD, Haruo Miyamura, MD, Jun-ichi Hayashi, MD, Masahide Hiratsuka, MD, Eiji Sunami, MD, Kazuaki Takabe, MD, and Shoji Eguchi, MD

Elective Removal of Convexo-Concave Björk-Shiley Valves 563

Pala B. Rajesh, FRCS, Geoffrey H. Smith, FRCS, Patricia V. Lawford, PhD, and Martin M. Black, PhD

Deficiency of Cartilage in the Segmental Bronchi of a Child: Congenital or Acquired? 565

Ronald J. Elfeldt, MD, Dietmar Schmidt, MD, Jochen Thies, MD, Detlev W. Schröder, MD, and Peter Seiffert, MD

Left Main Coronary Artery Reconstruction After Radiation Therapy 567

Vincent A. Gaudiani, MD, Sharon B. Siegel, MD, and Nancy L. McIntosh-Yellin, RN, MSN

How to Do It

Accurate Adjustment of De Vega Tricuspid Annuloplasty Using Transesophageal Echocardiography 570

Joseph W. Cook, MD

Alternative Method of Ultrafiltration After Cardiopulmonary Bypass 573

Robert C. Groom, CCP, Bechara F. Akl, MD, Robert A. Albus, MD, Aaron Hill, CCP, Ruben Munoz, CCP, and Edward A. Lefrak, MD

Extended Myectomy for Hypertrophic Obstructive Cardiomyopathy 575

Bruno J. Messmer, MD

Our Surgical Heritage

The Origins of Endotracheal Ventilation 578

Anthony R. C. Dobell, MD

Current Review

Traumatic Aortic Rupture: Twenty-Year Metaanalysis of Mortality and Risk of Paraplegia 585

Ulrich O. von Oppell, FCS(SA), PhD, Timothy T. Dunne, FIS, PhD, Mark K. De Groot, FRCS(C), and Peter Zilla, MD, PhD

Update

Adjustable Annuloplasty for Tricupsid Insufficiency 594

Mehmet C. Oz, MD, Daniel J. Goldstein, MD, and Eric A. Rose, MD

Report

Practice Guidelines in Cardiothoracic Surgery: Video-Assisted Thoracic Surgery 596

Correspondence

Aortic Valve Replacement With Heparin-Coated Perfusion System 603

Juan Sierra-Quiroga, MD, Jose Rubio-Alvarez, MD, PhD, Dario Durán Muñoz, MD, and Jose Benito García-Bengochea, MD

Reply

Robert D. Dowling, MD, Michael E. Brown, CCP, Robert O. Whittington, Jr, CCP, Joseph J. Quinlan, MD, and John M. Armitage, MD

Thromboembolic Prophylaxis in Patients Undergoing Thoracic Operations 603

Rafael Aguiló, MD, and Miguel Llobera, MD, PhD

Reply

Stanley Ziomek, MD, Raymond C. Read, MD, Louis M. Fink, MD, Ernest J. Ferris, MD, David R. McFarland, MD, and Robert W. Barnes, MD

Neutralization of Heparin by Trasylol 604

David A. Lane, PhD, Ian R. MacGregor, PhD, and F. Eric Preston, MD

Reply

Theodore A. Alston, MD, PhD, and Michael N. D'Ambra, MD

Primary B-Cell Malignant Lymphoma of the Lung 606

Peter Goldstraw, FRCS

Reply

Charles C. Canver, MD

Safety of Aprotinin in Profound Hypothermia and Circulatory Arrest 606

Craig R. Smith, MD, Linda B. Mongero, CCP, Carolyn M. DeRosa, BA, Robert E. Michler, MD, and Mehmet C. Oz, MD

Reply

Nicholas T. Kouchoukos, MD, Thoralf M. Sundt III, MD, and Jeffrey E. Saffitz, MD, PhD

Internal Mammary Artery for Arterial Pressure Monitoring 608

Sandeep T. Honnekeri, MCh

Closed Mitral Valvotomy: No More a Blind Procedure 608

Harinder Singh Bedi, MCh, Vijay Kumar Sharma, MCh, Vijay Kohli, MCh, Ravi R. Kasliwal, DM, and Naresh Trehan, MD

Review of Recent Books

Cardiopulmonary Bypass: Principles and Practice, edited by Glenn P. Gravlee, Richard F. Davis, and Joe R. Utley 569

Axel W. Joob, MD

Announcements

Information for Authors	**A-41, 42**
Guidelines for the Submission of Electronic Manuscripts	**A-43**
Events of Interest	**A-44, 45**
Forthcoming Articles	**A-46**
Preparing Your Practice for Change: Thoracic Surgery Into the Next Decade	**311**
The Third International Conference on Circulatory Support Devices for Severe Cardiac Failure	**343**
Notice From the American Board of Thoracic Surgery	**477, 495**
Notice From The Thoracic Surgery Foundation for Research and Education	**508**
The Society of Thoracic Surgeons: Thirty-first Annual Meeting	**572**
Notice From the Southern Thoracic Surgical Association	**595**
Program of Preparing Your Practice for Change: Thoracic Surgery Into the Next Decade	**610**
Classified Advertisements	**A-47, 48**
Index to Advertisers	**A-50**

Number 3 September 1994

Original Articles

Slide Tracheoplasty for Long-Segment Congenital Tracheal Stenosis **613**

Hermes C. Grillo, MD

Are Patients Receiving Amiodarone at Increased Risk for Cardiac Operations? **622**

Lynda L. Mickleborough, MD, Hiroshi Maruyama, MD, Shanas Mohamed, RN, Daniel C. Rappaport, MD, Eugene Downar, MD, Jagdish Butany, MD, and Zhau Sun, MA

Four-Year Experience With the CarboMedics Valve: The North American Experience **630**

Jack G. Copeland III, MD, Gulshan K. Sethi, MD, and the North American team of clinical investigators for the CarboMedics prosthetic heart valve

Performance of 96 CarboMedics Valve Replacements in 75 Patients Less Than Twenty-one Years of Age **639**

Carlos M. G. Duran, MD, PhD, Begonia Gometza, MD, Rafael Martin-Duran, MD, Elias Saad, MD, and Zohair Al-Halees, FRCS(C)

Nodal Metastasis and Sites of Recurrence After En Bloc Esophagectomy for Adenocarcinoma **646**

Geoffrey W. B. Clark, FRCS(Ed), Jeffrey H. Peters, MD, Adrian P. Ireland, FRCS(I), Afshin Ehsan, BS, Jeffrey A. Hagen, MD, Milton T. Kiyabu, MD, Cedric G. Bremner, FRCS, and Tom R. DeMeester, MD

Administration of Prostaglandin E_1 After Lung Transplantation Improves Early Graft Function 655

Motoi Aoe, MD, Gregory D. Trachiotis, MD, Kan Okabayashi, MD, Jill K. Manchester, BS, Oliver H. Lowry, MD, PhD, Joel D. Cooper, MD, and G. Alexander Patterson, MD

Ability to Culture Resectable Non–Small Cell Lung Carcinomas Is Correlated With Recurrence 662

Jill M. Siegfried, PhD, Autumn L. Gaither Davis, Joseph R. Testa, MD, Jay D. Hunt, PhD, Robert J. Keenan, MD, Samuel A. Yousem, MD, Pamela S. Ritter, RN, Peter F. Ferson, MD, and Rodney J. Landreneau, MD

Mitral Valve Reconstruction Versus Replacement for Degenerative or Ischemic Mitral Regurgitation 668

Cary W. Akins, MD, Alan D. Hilgenberg, MD, Mortimer J. Buckley, MD, Gus J. Vlahakes, MD, David F. Torchiana, MD, Willard M. Daggett, MD, and W. Gerald Austen, MD

Superior Late Patency of Small-Diameter Dacron Grafts Seeded With Omental Microvascular Cells: An Experimental Study 677

Miralem Pasic, MD, PhD, Werner Müller-Glauser, PhD, Ludwig K. von Segesser, MD, Mario Lachat, MD, Tomislav Mihaljevic, MD, and Marko I. Turina, MD

Severe Calcification Does Not Affect Long-Term Outcome of Mitral Valve Repair 685

Eugene A. Grossi, MD, Aubrey C. Galloway, MD, Bryan M. Steinberg, MD, Martin LeBoutillier III, MD, Julie Delianides, MA, F. Gregory Baumann, PhD, Frank C. Spencer, MD, and Stephen B. Colvin, MD

Pathogenesis of Spinal Cord Injury During Simulated Aneurysm Repair in a Chronic Animal Model 689

Otto E. Dapunt, MD, Peter S. Midulla, MD, Ali M. Sadeghi, MD, PhD, Craig K. Mezrow, MS, David Wolfe, MD, Alejandro Gandsas, MD, Rosario A. Zappulla, MD, PhD, Carol A. Bodian, PhD, M. Arisan Ergin, MD, PhD, and Randall B. Griepp, MD

Positron Emission Tomography of Lung Tumors and Mediastinal Lymph Nodes Using [^{18}F]Fluorodeoxyglucose 698

Walter J. Scott, MD, Jane L. Schwabe, MD, Naresh C. Gupta, MD, Naresh A. Dewan, MBBS, Steve D. Reeb, MD, Jeffrey T. Sugimoto, MD, and the Members of the PET-Lung Tumor Study Group

Resection of Lung Cancer Is Justified in High-Risk Patients Selected by Exercise Oxygen Consumption 704

Garrett L. Walsh, MD, Rodolfo C. Morice, MD, Joe B. Putnam, Jr, MD, Jonathan C. Nesbitt, MD, Marion J. McMurtrey, MD, M. Bernadette Ryan, MD, Joseph M. Reising, MD, Kelly M. Willis, MPH, Jeffrey D. Morton, MD, and Jack A. Roth, MD

Video-Assisted Minithoracotomy Versus Muscle-Sparing Thoracotomy for Performing Lobectomy 712

Roger Giudicelli, MD, Pascal Thomas, MD, Thierry Lonjon, MD, Jacques Ragni, MD, Nicole Morati, MD, Raymond Ottomani, MD, Pierre A. Fuentes, MD, Hanni Shennib, MD, and Michel Noirclerc, MD

Pentostatin-Augmented Interstitial Adenosine Prevents Postcardioplegia Injury in Damaged Hearts 719

Dudley A. Hudspeth, MD, Mark W. Williams, BS, Zhi-Qing Zhao, MD, PhD, Hiroki Sato, MD, Katsuhiko Nakanishi, MD, D. Scott McGee, BS, John W. Hammon, Jr, MD, Jakob Vinten-Johansen, PhD, and David G. L. Van Wylen, PhD

Eliminating the Strong Pulmonary Vasoconstriction Caused by Euro-Collins Solution 728

Per Ola Kimblad, MD, PhD, and Stig Steen, MD, PhD

Heparin-Coated Cardiopulmonary Bypass Circuits: Hemostatic Alterations and Postoperative Blood Loss 734

William R. Wagner, PhD, Peter C. Johnson, MD, Kathleen A. Thompson, BS, and Gary C. Marrone, MD

Intraoperative Assessment of Coronary Artery Bypass Grafts Using a Pulsed Doppler Flowmeter 742

Yves A. G. Louagie, MD, Jean-Paul Haxhe, MD, Jacques Jamart, MD, Michel Buche, MD, and Jean-Claude Schoevaerdts, MD

Development of a New Intraoperative Radiofrequency Ablation Technique Using a Needle Electrode 750

Hiroshi Ohtake, MD, Takuro Misaki, MD, Yasuhiro Matsunaga, MD, Go Watanabe, MD, Masao Takahashi, MD, Isao Matsumoto, MD, Michio Kawasuji, MD, and Yoh Watanabe, MD

Extracorporeal Life Support After Heart or Lung Transplantation 754

Richard I. Whyte, MD, G. Michael Deeb, MD, Kenneth R. McCurry, MD, Harry L. Anderson III, MD, Steven F. Bolling, MD, and Robert H. Bartlett, MD

Coronary Artery Fistula in the Pediatric Age Group: A 19-Year Institutional Experience 760

J. Terrance Davis, MD, Hugh D. Allen, MD, John J. Wheller, MD, David P. Chan, MD, Daniel M. Cohen, MD, Douglas W. Teske, MD, Steven C. Cassidy, MD, Jo M. Craenen, MD, and James W. Kilman, MD

Effects of Cold and Warm Blood Cardioplegia Assessed by Myocardial pH and Release of Metabolic Markers 764

Michel Carrier, MD, Alain Tourigny, PE, Nathalie Thoribé, PE, Michel Montpetit, PE, Ahmad Khalil, MD, B. Charles Solymoss, MD, and L. Conrad Pelletier, MD

Comparison of Two Strategies for Myocardial Management During Coronary Artery Operations 768

Jonathan R. Anderson, FRCS, Mojgan Hossein-Nia, PhD, Panny Kallis, FRCS, Maurice Pye, MRCP, David W. Holt, MRCPath, Andrew J. Murday, FRCS, and Tom Treasure, FRCS

Monitoring of Anticoagulation in Aprotinin-Treated Patients During Heart Operation 774

Noriyuki Tabuchi, MD, Tjin L. Njo, MS, Izaak Tigchelaar, ECP, Rob J. Huyzen, MD, Piet W. Boonstra, MD, PhD, and Willem van Oeveren, PhD

Topical Aprotinin in Cardiac Operations 778

David J. O'Regan, FRCS, Nick Giannopoulos, MD, Neeraj Mediratta, FRCS, Simon W. H. Kendall, FRCS, Alberto Forni, MD, Ravi Pillai, FRCS, and Stephen Westaby, FRCS

Acute Endothelial Reperfusion Injury After Coronary Artery Bypass Grafting 782

Pyng Jing Lin, MD, Chau-Hsiung Chang, MD, Ying-Shiung Lee, MD, Yun-Ying Chou, MS, Jaw-Ji Chu, MD, Jen-Ping Chang, MD, and Ming-Jang Hsieh, MD

Chronic Exposure to Cyclosporine Affects Endothelial and Smooth Muscle Reactivity in the Rat Aorta 789

Raymond Cartier, MD, François Dagenais, MD, Charleen Hollmann, RN, Helen Cambron, and Josie Buluran, BS

Left Ventricular Motion After Bypass Operation for Coronary Artery Disease With Collaterals 795

Yasuo Matsuda, MD, Yoshinori Tanimoto, MD, Yurio Kobayashi, MD, Kenji Hayashi, MD, Tomoyuki Masuda, MD, and Kensuke Sakata, MD

Heparin and Antithrombin III Levels During Cardiopulmonary Bypass: Correlation With Subclinical Plasma Coagulation 799

Kazuhiro Hashimoto, MD, Masaaki Yamagishi, MD, Tatsuumi Sasaki, MD, Masamichi Nakano, MD, and Hiromi Kurosawa, MD

New Approach to Aortic Dissection: Development of an Insertable Aortic Prosthesis 806

Hideaki Yoshida, MD, Keishu Yasuda, MD, and Tatsuzo Tanabe, MD

Preoperative Carcinoembryonic Antigen Level as a Prognostic Indicator in Resected Primary Lung Cancer 811

Philippe Icard, MD, Jean-François Regnard, MD, Arthur Essomba, MD, Vincenzo Panebianco, MD, Pierre Magdeleinat, MD, and Philippe Levasseur, MD

Can We Afford to Do Cardiac Operations in 1996? A Risk–Reward Curve for Cardiac Surgery 815

Thomas E. Williams, Jr, MD, PhD, William J. Fanning, MD, Leila Link, RN, CCT, W. C. Benton, PhD, Gerard S. Kakos, MD, Randall L. Miller, MD, Thomas D. Hankins, CP, and David P. Blom

Stunning, Preconditioning, and Functional Recovery After Global Myocardial Ischemia 822

Steven F. Bolling, MD, Douglas A. Olszanski, BS, Keith F. Childs, BS, Kim P. Gallagher, PhD, and Xue-Han Ning, MD

Right Coronary Artery With Anomalous Origin and Slit Ostium 828

Raul Garcia Rinaldi, MD, Jorge Carballido, MD, Richard Giles, MD, Emilio Del Toro, MD, and Raul Porro, MD

Use of Glutaraldehyde Solution in the Treatment of Acute Aortic Dissections 833

Ying-Fu Chen, MD, Shah-Hwa Chou, MD, Chaw-Chi Chiu, MD, Young-Tso Lin, MD, and Huey-Ji Wang, MD

Associated Primary Esophageal and Lung Carcinoma: A Study of 39 Patients 837

François Fékété, MD, Alain Sauvanet, MD, Gilles Kaisserian, MD, Bertrand Jauffret, MD, Khedija Zouari, MD, Laurent Berthoux, MD, and Jean-François Flejou, MD

Surgical Anatomy of the Phrenic Nerve and Internal Mammary Artery 843

W. Andrew Owens, FRCSI, Dennis J. Gladstone, FRCS, and David J. Heylings, MB, BCh

Lung Preservation With Euro-Collins, University of Wisconsin, Wallwork, and Low-Potassium–Dextran Solutions 845

Lihua Xiong, MD, Michel Mazmanian, MD, Alain R. Chapelier, MD, Jean Reignier, MD, Michel Weiss, MD, Philippe G. Dartevelle, MD, Philippe Hervé, MD, and the Université Paris-Sud Lung Transplant Group

Direct Effects of Acute Administration of 3, 5, 3′ Triiodo-L-Thyronine on Myocyte Function 851

Jennifer D. Walker, MD, Fred A. Crawford, Jr, MD, Rupak Mukherjee, MS, Michael R. Zile, MD, and Francis G. Spinale, MD, PhD

Left Ventricular Function and Coronary Artery Disease Progression Early After Coronary Bypass Grafting 857

Dimitris Tousoulis, MD, Graham Davies, FRCP, Tom Crake, MD, Sunil K. Ohri, FRCS, Parachuri Rao, FRCS, and Kenneth M. Taylor, FRCS

Video-Assisted Cardioscopy in Congenital Heart Operations 864

Redmond P. Burke, MD, Guido Michielon, MD, and Gil Wernovsky, MD

Case Reports

Drug Infusion Through a Branch of the Aortocoronary Vein Graft for Refractory Coronary Spasm 869

Hisanori Mayumi, MD, Yoshito Kawachi, MD, Hiroyuki Kohno, MD, Yuji Akaiwa, MD, Manabu Hisahara, MD, Kouji Fukae, MD, Atsuhiro Nakashima, MD, and Hisataka Yasui, MD

Successful Reoperation for Ascending Aorta and Arch Aneurysm in a Jehovah's Witness 871

Joseph S. Coselli, MD, Suat Büket, MD, and George D. Van Cleve, MD

Aortic Dissection Involving a Double Aortic Arch With a Right Descending Aorta 874

Peter S. Midulla, MD, Otto E. Dapunt, MD, Ali M. Sadeghi, MD, PhD, Cid S. Quintana, MD, and Randall B. Griepp, MD

Left Ventricular Outflow Tract Obstruction and Hemolytic Anemia After Mitral Valve Repair With a Duran Ring 876

J. Alberto Lopez, MD, Mark Schnee, MD, Carlos M. Gaos, MD, and Susan Wilansky, MD

Aortic Atresia With Ventricular Septal Defect and Normal Left Ventricle: One-Stage Correction in the Neonate 878

Katrien Francois, MD, Clare Dollery, MD, and Martin J. Elliott, FRCS

Resuscitation After Modified Fontan Procedure 880

Prabhat Tewari, MD, and Suresh G. Babu, MD

Open Heart Operation After Pneumonectomy 882

Benny Medalion, MD, Amir Elami, MD, Eli Milgalter, MD, and Gideon Merin, MD

Another Approach for Aortic Valve Replacement Through Left Thoracotomy 884

Hajime Hirose, MD, Syougo Umeda, MD, Yoshio Mori, MD, Shinji Murakawa, MD, Ken-ichiro Azuma, MD, and Takashi Hashimoto, MD

Gastrobronchial Fistula: An Unusual Complication of Esophagectomy 886

Jeffrey M. Stal, MD, Patrick J. Hanly, MD, and Gail E. Darling, MD

Transmission of *Lactobacillus* Pneumonia by a Transplanted Lung 887

Stephen D. Jones, MD, David A. Fullerton, MD, Martin R. Zamora, MD, David B. Badesch, MD, David N. Campbell, MD, and Frederick L. Grover, MD

Diverticulum of the Superior Vena Cava 889

Sadahiro Sai, MD, Izuru Yoshida, MD, Yasuhiro Itoh, MD, Kohki Niibori, MD, Mototsugu Ninomiya, MD, Koichi Tabayashi, MD, and Hitoshi Mohri, MD

Mechanical Flow Obstruction After Heart Transplantation Diagnosed by TEE 890

Jean-Luc Canivet, MD, Jean-Olivier Defraigne, MD, PhD, Jean-Claude Demoulin, MD, PhD, and Raymond Limet, MD, PhD

How to Do It

Airway Management During Bilateral Sequential Lung Transplantation for Cystic Fibrosis 892

Mark S. Soberman, MD, Erik J. Kraenzler, MD, Michael Licina, MD, Charles D. Fraser, Jr, MD, and Thomas J. Kirby, MD

Collective Review

Cardiopulmonary Bypass Resuscitation for Accidental Hypothermia 895

Doris F. Vretenar, MD, John D. Urschel, MD, James C. W. Parrott, MD, and Helmut W. Unruh, MD

Key References

Adjuvant and Neoadjuvant Therapy for Stages I Through III Non–Small Cell Lung Cancer 899

Valerie W. Rusch, MD

Update

Endoscopic Gluing of Bronchopleural Fistula 901

Massimo Torre, MD, Eugenio Quaini, MD, Mario Ravini, MD, Franco Pieri Nerli, MD, and Marco Maioli, MD

Report

Practice Guidelines in Cardiothoracic Surgery: Transplantation (Heart, Lung, Heart-Lung) and Heart Assist Devices 903

Correspondence

Bacterial Colonies Around the Suture Material in Bacteremia With a Valve Prosthesis 911

Yasushi Terada, MD, Toshio Mitsui, MD, and Tatsuo Yamamoto, MD

Technique for Control of Difficult Cardiac Bleeding 911

Harinder Singh Bedi, MCh, Vijay Kumar Sharma, MCh, and Naresh Trehan, MD

Brain Protection During Cerebral Perfusion 912

Richard A. Jonas, MD

Sodium Nitroprusside During Aortic Cross-Clamping 912

Corrado P. Marini, MD, and Ira M. Nathan, PhD

Reply

Aurel C. Cernaianu, MD, and Anthony J. DelRossi, MD

Postoperative Atrial Arrhythmias 913

Idris M. Ali, MD, and David A. Murphy, MD

Reply

James L. Cox, MD, Lawrence L. Creswell, MD, Richard B. Schuessler, PhD, and Michael Rosenbloom, MD

Allografts for Outflow Tract Reconstruction in Pediatric Patients 915

Francesco Santini, MD, and Alessandro Mazzucco, MD

Reply

Robert E. Michler, MD, Jonathan M. Chen, MD, and Jan M. Quaegebeur, MD

Intraaortic Balloon Rupture: A Possible Means of Prevention 915

Shuli Silberman, MD, Ofer Merin, MD, Daniel Fink, MD, and Dani Bitran, MD

Operation for Lung Cancer in the Elderly: What About Octogenarians? 916

Marc Riquet, MD, Dominique Manac'h, MD, Françoise Le Pimpec-Barthes, MD, Denis Debrosse, MD, Antoine Dujon, MD, Michel Saab, MD, and Bernard Debesse, MD

Review of Recent Books

Ischemia-Reperfusion in Cardiac Surgery, edited by Hans Michael Piper and Claus J. Preusse 749

John H. Sanders, Jr, MD

Lung Cancer: Frontiers in Science and Treatment, edited by Giovanni Motta 821

Thomas W. Shields, MD

Announcements

Information for Authors A-37, 38

Guidelines for the Submission of Electronic Manuscripts A-39

Events of Interest A-40, 41

Forthcoming Articles A-42

The Society of Thoracic Surgeons: Thirty-first Annual Meeting 629

Notice From the American Board of Thoracic Surgery 645, 894

Notice From The Thoracic Surgery Foundation for Research and Education 684
Notice From the Southern Thoracic Surgical Association 733
The Third International Conference on Circulatory Support Devices for Severe Cardiac Failure 902
Program of the Forty-first Annual Meeting of the Southern Thoracic Surgical Association 917
Classified Advertisements A-43, 44, 45
Index to Advertisers A-48

Number 4 October 1994

Editorials

Some Thoughts on the Societal Obligations of Thoracic Surgeons 921
W. Gerald Rainer, MD

The Evolution of Risk Assessment 922
Robert L. Kormos, MD

Original Articles

Postthoracotomy Pain Management Using Continuous Epidural Analgesia in 1,324 Patients 924
Timothy R. Lubenow, MD, L. Penfield Faber, MD, Robert J. McCarthy, PharmD, Eileen M. Hopkins, RN, William H. Warren, MD, and Anthony D. Ivankovich, MD

Experimental Evaluation of Different Chordal Preservation Methods During Mitral Valve Replacement 931
Marc R. Moon, MD, Abe DeAnda, Jr, MD, George T. Daughters II, MS, Neil B. Ingels, Jr, PhD, and D. Craig Miller, MD

Fontan Operation: Influence of Modifications on Morbidity and Mortality 945
Marshall L. Jacobs, MD, and William I. Norwood, Jr, MD, PhD

Aerobic Blood Cardioplegia for Revascularization of Acute Infarct: Effects of Delivery Temperature 953
Bradley L. Bufkin, MD, Richard J. Mellitt, MD, John Parker Gott, MD, Alice Hsi Huang, PhD, Pan-Chih, MD, and Robert A. Guyton, MD

The Optimal Cardioplegic Temperature 961
Nobuhiko Hayashida, MD, John S. Ikonomidis, MD, Richard D. Weisel, MD, Toshizumi Shirai, MD, Joan Ivanov, RN, Susan M. Carson, AHT, Molly K. Mohabeer, BS, Laura C. Tumiati, BSc, and Donald A. G. Mickle, MD

Predictors of Operative Mortality and Morbidity After Infant Heart Transplantation 972
James S. Tweddell, MD, Charles E. Canter, MD, Nancy D. Bridges, MD, Sharon Moorhead, RN, Charles B. Huddleston, MD, and Thomas L. Spray, MD

Pericardium-Lined Skeletal Muscle Ventricles in Circulation up to 589 Days 978

Gregory A. Thomas, MD, Huiping Lu, MD, Susumu Isoda, MD, PhD, Robert L. Hammond, BA, Hidehiro Nakajima, MD, PhD, Hisako O. Nakajima, MD, Michael Colson, MS, and Larry W. Stephenson, MD

Combined Operation for Lung Cancer and Cardiac Disease 989

Daniel L. Miller, MD, Thomas A. Orszulak, MD, Peter C. Pairolero, MD, Victor F. Trastek, MD, and Hartzell V. Schaff, MD

Operation and Intracavitary Photodynamic Therapy for Malignant Pleural Mesothelioma: A Phase II Study 995

Hiroshi Takita, MD, Thomas S. Mang, PhD, Gregory M. Loewen, DO, Joseph G. Antkowiak, MD, Derek Raghavan, MD, PhD, James R. Grajek, MBA, and Thomas J. Dougherty, PhD

Low-Dose Cyclosporine Therapy in Triple-Drug Immunosuppression for Heart Transplant Recipients 999

Bernard Hausen, MD, Stefanos Demertzis, MD, Roland Rohde, MD, Johannes M. Albes, MD, Hans-Joachim Schäfers, MD, and Hans-Georg Borst, MD

Magnesium Cardioplegia Reduces Cytosolic and Nuclear Calcium and DNA Fragmentation in the Senescent Myocardium 1005

Takuro Tsukube, MD, James D. McCully, PhD, Elizabeth A. Faulk, MD, Micheline Federman, PhD, Joseph LoCicero III, MD, Irvin B. Krukenkamp, MD, and Sidney Levitsky, MD

Management of Tracheal and Bronchial Stenoses With the Gianturco Stent 1012

C. Humberto Carrasco, MD, Jonathan C. Nesbitt, MD, Chusilp Charnsangavej, MD, M. Bernardette Ryan, MD, Garrett L. Walsh, MD, Kotaro Yasumori, MD, David D. Lawrence, MD, and Sidney Wallace, MD

Predictable Reduction in Left Ventricular Stroke Work and Oxygen Utilization With an Implantable Centrifugal Pump 1018

Andrew H. Goldstein, MD, John J. Pacella, MS, and Richard E. Clark, MD

Regulation of Pulmonary Vascular Resistance by Endogenous and Exogenous Nitric Oxide 1025

Joseph R. Van Camp, MD, Christopher Yian, BS, and Flavian M. Lupinetti, MD

Treatment of Acute Pulmonary Hypertension With Inhaled Nitric Oxide 1031

Martin Tönz, MD, Ludwig K. von Segesser, MD, Julian Schilling, MD, Thomas F. Lüscher, MD, Georg Noll, MD, Boris Leskosek, BA, and Marko I. Turina, MD

Aprotinin Preserves Hemostasis in Aspirin-Treated Patients Undergoing Cardiopulmonary Bypass 1036

Noriyuki Tabuchi, MD, Rolf C. G. Huet, MD, PhD, Augueste Sturk, MD, PhD, Leon Eijsman, MD, PhD, and Charles R. H. Wildevuur, MD, PhD

Determinants of Low Systemic Vascular Resistance During Cardiopulmonary Bypass 1040

George T. Christakis, MD, Stephen E. Fremes, MD, Jean-Paul Koch, MD, Steven Harwood, CCP, Stephen Juhasz, CCP, Eldon Sharpe, CPC, Kathy A. Deemar, CCP, Carole Hamilton, CCP, Erluo Chen, MPh, Vivek Rao, MD, Genevieve Chang, MD, and Bernard S. Goldman, MD

Cardiac Transplant Donor Heart Allocation Based on Prospective Tissue Matching 1050

Verdi J. DiSesa, MD, Rebekah Mull, BS, Elaine S. Daly, BA, L. Henry Edmunds, Jr, MD, Donna M. Mancini, MD, and Howard J. Eisen, MD

Coronary Artery Bypass Grafting in Patients With Transplanted Livers 1054

Robert F. Dunton, MD, Karl J. Karlson, MD, Howard K. Leonardi, MD, Roger L. Jenkins, MD, and Robert L. Berger, MD

Is It True That Cardiac Operations With Cardiopulmonary Bypass Impair the Reticuloendothelial System? 1059

Takatsugu Shimono, MD, Yukihiko Nosé, MD, Isao Yada, MD, Yuo Kanamori, MD, Shigeyuki Makino, MD, Hitoshi Kusagawa, MD, Tomoaki Sato, MD, and Minoru Kusagawa, MD

Inhibition of Neutrophil Adhesion Does Not Prevent Ischemic Spinal Cord Injury 1064

Andrew D. Forbes, MD, Jefferson C. Slimp, PhD, Robert K. Winn, PhD, and Edward D. Verrier, MD

Coronary Revascularization in the Elderly: Determinants of Operative Mortality 1069

Jack J. Curtis, MD, Joseph T. Walls, MD, Theresa M. Boley, MSN, Richard A. Schmaltz, MD, Todd L. Demmy, MD, and Nazih Salam, MD

Prosthetic Valve Endocarditis: Superiority of Surgical Valve Replacement Versus Medical Therapy Only 1073

Victor L. Yu, MD, Guodong D. Fang, MD, Thomas F. Keys, MD, Alan A. Harris, MD, Layne O. Gentry, MD, Peter C. Fuchs, MD, Marilyn M. Wagener, MPH, and Edward S. Wong, MD

Suppression of the Pituitary Thyroid Axis After Cardiopulmonary Bypass in the Neonate 1078

Richard D. Mainwaring, MD, John J. Lamberti, MD, Glenn F. Billman, MD, and Jerald C. Nelson, MD

Influence of pH of Preservation Solution on Lung Viability 1083

Yoshinori Hiramatsu, MD, Ryusuke Muraoka, MD, Yukio Chiba, MD, and Masato Sasaki, MD

Single-Layered Cervical Esophageal Anastomoses: A Prospective Study of Two Suturing Techniques 1087

Romeo Bardini, MD, Luigi Bonavina, MD, Massimo Asolati, MD, Alberto Ruol, MD, Carlo Castoro, MD, and Ermanno Tiso, MD

Neurogenic Tumors of the Thorax 1091

Michel E. Ribet, MD, and Gilles R. Cardot, MD

Pulmonary Circulation Evaluation Before Cavopulmonary Connections: the Cavopulmonary Bypass 1096

Alain Serraf, MD, Lucile Houyel, MD, Francoise Nicolas, MD, Francois Lacour-Gayet, MD, Jacqueline Bruniaux, MD, Jerome Petit, MD, Miguel Sousa Uva, MD, Daniel Roux, MD, and Claude Planche, MD

Possible Deleterious Effects of Glucose on Immature Myocytes Under Hypothermic Conditions 1103

Hiroyuki Orita, MD, Manabu Fukasawa, MD, Shigeki Hirooka, MD, Hideaki Uchino, MD, Kana Fukui, MD, Minoru Kohi, MD, and Masahiko Washio, MD

Systemic Ventricular Outflow Obstruction Progresses After the Fontan Operation 1108

Kathleen M. Finta, MD, Robert H. Beekman, MD, Flavian M. Lupinetti, MD, and Edward L. Bove, MD

Can a Dilated Coronary Sinus Produce Left Ventricular Inflow Obstruction? An Unrecognized Entity 1114

Andrew D. Cochrane, FRACS, Aubyn Marath, FRCS, and Roger B. B. Mee, FRACS

Endothelium-Dependent Relaxation After Short-Term Preservation of Vascular Grafts 1117

Giorgio Massa, MD, Richard Ingemansson, MD, Trygve Sjöberg, PhD, and Stig Steen, MD, PhD

Calcium and Cardioplegic Protection of the Ischemic Immature Heart: Impact of Hypoxemia From Birth 1123

E. Jack Baker, MD, and John E. Baker, PhD

Innervated Rectus Abdominis Myofascial Flap for Dynamic Cardiomyoplasty 1131

David S. Wijnberg, MD, Tjark Ebels, PhD, and Peter H. Robinson, PhD

Combined Heart and Kidney Transplantation With Allografts From the Same Donor 1135

Carlos Blanche, MD, Mario Valenza, MD, Lawrence S. C. Czer, MD, Peter Barath, MD, Dan Admon, MD, Deborah Harasty, RN, Caron Utley, RN, and Alfredo Trento, MD

Subxiphoid Pericardial Window in the Diagnosis of Penetrating Cardiac Trauma 1139

Rafael Andrade-Alegre, MD, and Luis Mon, MD

Risk Stratification in Patients Bridged to Cardiac Transplantation 1142

Marc T. Swartz, BA, Timothy V. Votapka, MD, Lawrence R. McBride, MD, Douglas P. Lohmann, ME, Debra A. Moroney, BSN, and D. Glenn Pennington, MD

New Approach to Great-Vessel Reconstruction in Transposition Complexes With Interrupted Aortic Arch 1146

John R. Liddicoat, MD, V. Mohan Reddy, MD, and Frank L. Hanley, MD

Primary Sarcoma of the Lung: A Clinical Study With Long-Term Follow-up 1151

Julius P. Janssen, MD, Jef J. S. Mulder, MD, Sjoerd S. Wagenaar, PhD, Hans R. J. Elbers, PhD, and Jules M. M. van den Bosch, PhD

Tricuspid Valve Repair for Biopsy-Induced Regurgitation After Cardiac Transplantation 1156

Arthur J. Crumbley III, MD, and Adrian B. Van Bakel, MD

Case Reports

Carcinoid Heart Disease: Early Failure of an Allograft Valve Replacement 1161

Sunil K. Ohri, FRCS, John B. Schofield, MRCPath, Humphrey Hodgson, FRCP, Celia M. Oakley, FRCP, and Bruce E. Keogh, FRCS

Replacement of Entire Aorta From Aortic Valve to Bifurcation During One Operation 1164

Lars G. Svensson, MD, PhD, David M. Shahian, MD, Fred G. Davis, MD, Michael H. Entrup, MD, Wendy A. Kimmel, CCP, Donna M. McGrath, RN, Edward R. Jewel, MD, and Anthony W. Gray, Jr, MD

Open Heart Operation in a Young Child With Spherocytosis 1166

Youichi Kawahira, MD, Hidefumi Kishimoto, MD, Masahiko Iio, MD, Seiichiro Ikawa, MD, Hideki Ueda, MD, Futoshi Kayatani, MD, and Takeshi Nakada, MD

Home Heparin Therapy Used in a Pregnant Patient With a Mechanical Heart Valve Prosthesis 1168

Victor A. Ferraris, MD, PhD, Robert R. Klingman, MD, Linda Dunn, RN, Steven Fein, MD, Marla Eglowstein, MD, and Renee Samelson, MD

Gastric Perforation After Aortocoronary Bypass Grafting With the Right Gastroepiploic Artery 1170

Jan Witkop, MD, Bruno R. S. Dillemans, MD, Jan G. Grandjean, MD, Johannes L. Bams, MD, and Tjark Ebels, MD, PhD

Mitral Insufficiency After Pericardiectomy for Constrictive Pericarditis 1171

Richard E. Buckingham, Jr, MD, Anthony P. Furnary, MD, Michael T. Weaver, MD, H. Storm Floten, MD, and Richard F. Davis, MD

Heart-Lung Transplantation in Situs Inversus and Chest Wall Deformity 1174

Andrew J. Parry, FRCS, John O'Fiesh, FRCS, John Wallwork, FRCS, and Stephen R. Large, FRCS

Single-Lung Transplantation in Situs Inversus 1176

Steven J. Mentzer, MD, Sary F. Aranki, MD, John J. Reilly, MD, Malcolm M. DeCamp, MD, Phillip Hartigan, MD, Walter O'Donnell, MD, and David J. Sugarbaker, MD

New Operative Method for Tracheal Compression in Congenital Heart Disease 1179

Hiroshi Akita, MD, Akira Ohta, MD, Yoshiyasu Egawa, MD, Tomohisa Kawahito, MD, Kazuya Horike, MD, Arishige Kirino, MD, and Chosei Matsumura, MD

Emergency Operation for Thoracic Aortic Aneurysm Caused by the Ehlers-Danlos Syndrome 1180

Kimikazu Hamano, MD, Yoshihide Minami, MD, Yoshihiko Fujimura, MD, Hidetoshi Tsuboi, MD, Shouichi Furukawa, MD, Tatsuro Oda, MD, and Kensuke Esato, MD

Left Ventricular Cannula Obstruction in a Patient With Previous Ventricular Aneurysmectomy 1182

Timothy V. Votapka, MD, Marc T. Swartz, BA, Frederick A. Dressler, MD, and Lawrence R. McBride, MD

Elective Reoperation for a Strut Fracture in a Björk-Shiley Convexo-concave Mitral Valve 1184

Michael E. Cane, MD, and Lynn B. McGrath, MD

How to Do It

Technique to Stent the Open Sternum After Cardiac Operations 1186

Stephen D. Jones, MD, David A. Fullerton, MD, David N. Campbell, MD, James Jaggers, MD, James M. Brown, MD, Rosie Smith, RN, and Frederick L. Grover, MD

Inaccuracies and Variability of Indirect Pressure Measurements During Cardioplegia Administration 1188

Norman S. Kato, MD, Gerald D. Buckberg, MD, Christine K. Cushen, CCP, and Colin R. Whitwam, CCP

Identification of Internal Mammary Artery Graft at the Time of Reoperation 1192

Bernard L. Huang, MD, and Irving M. Madoff, MD

Exposure of the Intramyocardial Left Anterior Descending Artery 1194

Mehmet C. Oz, MD, Matthew M. Cooper, MD, Thomas J. Hickey, PA, and Eric A. Rose, MD

Our Surgical Heritage

A Surgeon to Remember: Notes About Vladimir Demikhov 1196

Harris B. Shumacker, Jr, MD

Current Review

Hemodynamic Analysis Could Resolve the Pulsatile Blood Flow Controversy 1199

Gordon Wright, PhD

Update

Early and Late Results Following Emergency Isolated Myocardial Revascularization During Hypothermic Fibrillatory Arrest 1205

Cary W. Akins, MD

Report

Practice Guidelines in Cardiothoracic Surgery: Thoracic Aortic Disease 1207

Correspondence

Database Experience With Coronary Artery Bypass Grafting 1212

Chao Chen, PhD, and Glenn W. Laub, MD

Reply

Fred H. Edwards, MD

Put Our Patients First 1212

Robert L. Thurer, MD

Conduction Disturbances After Open Heart Operation in a Patient Receiving Amiodarone 1213

Yasushi Terada, MD, Toshio Mitsui, MD, and Iwao Yamaguchi, MD

Transplantation of Atrioventricular Valves 1214

Solomon Victor, FRCP, and Vijaya M. Nayak, MS

Coronary Sinus Rupture **1214**

Thomas J. Berger, MD
Abel A. Garibaldi, MD

Reply

Arlen G. Fleisher, MD, and George E. Reed, MD

Reply

Philippe Menasché, MD, PhD

Surgeons, Nonsurgeons, and Cardiac Pacing **1216**

Victor Parsonnet, MD

Reply

T. Bruce Ferguson, Jr, MD, Bruce D. Lindsay, MD, and John P. Boineau, MD

Intramural Coronary Artery **1218**

Tom R. Karl, MD

SEALY SYMPOSIUM

Cardiovascular Surgery Symposium Honoring Will Camp Sealy, MD **1219**

Program **1221**

Welcoming Remarks **1222**

Martin L. Dalton, MD, Kenneth C. Henderson, MD, and W. Douglas Skelton, MD

Will Camp Sealy: Surgical Innovator, Scholar, Exceptional Teacher, and True Georgian **1223**

Ivan W. Brown, Jr, MD

Will C. Sealy, MD: The Father of Arrhythmia Surgery—The Story of the Fisherman With a Fast Pulse **1228**

W. Randolph Chitwood, Jr, MD

Importance of Elevated Plasma Homocysteine Levels as a Risk Factor for Atherosclerosis **1240**

Philippe A. Masser, MD, Lloyd M. Taylor, Jr, MD, and John M. Porter, MD

Hemodynamic Considerations Regarding the Mechanism and Prevention of Aortic Dissection **1247**

Francis Robicsek, MD, and Mano J. Thubrikar, PhD

Surgical Treatment of Wolff-Parkinson-White Syndrome: A "Retrospectroscopic" View **1254**

Gerard M. Guiraudon, MD

Surgical Treatment of Cardiac Dysrhythmias in Infants and Children **1262**

Fred A. Crawford, Jr, MD, and Paul C. Gillette, MD

From Fisherman to Fibrillation: An Unbroken Line of Progress **1269**

James L. Cox, MD, John P. Boineau, MD, Richard B. Schuessler, PhD,
Kathryn M. Kater, MSN, and Demetrios G. Lappas, MD

Surgical Treatment of Left Ventricular Outflow Obstruction in the Neonate: Profound Hypothermia and Circulatory Arrest 1274

John W. Hammon, Jr

The Changing Strategies in Operation for Transposition of the Great Vessels 1278

James A. Alexander, MD, Daniel G. Knauf, MD, Michael A. Greene, MD, L. H. S. van Mierop, MD, and Daniel J. O'Brien, PhD

Early Gene Changes in Myocardial Ischemia 1282

Andrew S. Wechsler, MD, John C. Entwistle III, MD, Thomas Yeh, Jr, MD, Mai Ding, MD, and Emma R. Jakoi, PhD

Crystalloid Potassium Cardioplegia: Concepts and Early Studies 1285

William A. Gay, Jr, MD

Reflections on Definitive Surgical Treatment of Postinfarction Ventricular Tachycardia 1287

Jay G. Selle, MD

Direct Operation Versus ICD Therapy for Ischemic Ventricular Tachycardia 1291

T. Bruce Ferguson, Jr, MD, Joseph M. Smith, MD, James L. Cox, MD, Michael E. Cain, MD, and Bruce D. Lindsay, MD

Clinical Experience With the Implantable Cardioverter Defibrillator 1297

J. Mark Williams, MD, David T. Rock, MD, Susan J. Pabst, MD, Catherine R. Grill, RN, Harry J. DeAntonio, DO, Rehan Mahmud, MD, and W. Randolph Chitwood, Jr, MD

Closing Comments 1304

Will C. Sealy, MD

Announcements

Information for Authors A-35, 36
Guidelines for the Submission of Electronic Manuscripts A-37
Events of Interest A-38, 39
Forthcoming Articles A-40
The Society of Thoracic Surgeons: Thirty-first Annual Meeting 1058
Notice From the American Board of Thoracic Surgery 1090, 1198
Notice From the Southern Thoracic Surgical Association 1187
Classified Advertisements A-41, 42, 43
Index to Advertisers A-44

Number 5 November 1994

Editorials

Reporting the Results of Blood Conservation Studies: The Need for Uniform and Comprehensive Methods 1305

John H. Lemmer, Jr, MD

Professional Liability 1994 1307

Barry M. Manuel, MD

Outpatient LVAD: Its Time Has Arrived 1309

O. H. Frazier, MD

Original Articles

Inhibition of Chronic Vascular Rejection in Primate Cardiac Xenografts Using Mycophenolate Mofetil 1311

Daniel P. O'Hair, MD, Robert P. McManus, MD, and Richard Komorowski, MD

Tolerance to Experimental Cardiac Allografts Produced by Neonatal Intrathymic Injection of Donor Cells 1316

Gary M. Kline, MD, Zhenya Shen, MD, Muhammad Mohiuddin, MD, Susan Rostami, BS, and Verdi J. DiSesa, MD

Basic Fibroblast Growth Factor Identified in Chronically Stimulated Cardiomyoplasties 1320

Vincent F. Blood, MD, Michael G. Magno, PhD, William F. Bailey, MD, Yi Shi, MD, PhD, Lev Yurgenev, BS, Fred DiMeo, BS, Richard N. Edie, MD, and John D. Mannion, MD

Differences in Early Results After Single-Lung Transplantation 1327

R. Duane Davis, Jr, MD, Elbert P. Trulock, MD, Jennifer Manley, Michael K. Pasque, MD, Sudhir Sundaresan, MD, Joel D. Cooper, MD, G. Alexander Patterson, MD, and Washington University Lung Transplant Group

Impact of Pulmonary Hypertension on Outcome After Single-Lung Transplantation 1336

Ko Bando, MD, Robert J. Keenan, MD, Irvin L. Paradis, MD, Hiroaki Konishi, MD, Kanshi Komatsu, MD, Robert L. Hardesty, MD, and Bartley P. Griffith, MD

Long-Term Results in Surgically Managed Esophageal Achalasia 1343

Richard A. Malthaner, MD, Thomas R. Todd, MD, Linda Miller, RN, and F. Griffith Pearson, MD

Risk Stratification Using The Society of Thoracic Surgeons Program 1348

Brack G. Hattler, MD, PhD, Carol Madia, PA, Carol Johnson, CRNP, John M. Armitage, MD, Robert L. Hardesty, MD, Robert L. Kormos, MD, Si M. Pham, MD, Dale N. Payne, MD, and Bartley P. Griffith, MD

Coronary Reoperation: Results of Adding an Internal Mammary Artery Graft to a Stenotic Vein Graft 1353

F. Edward Turner, MD, Bruce W. Lytle, MD, Daniel Navia, MD, Floyd D. Loop, MD, Paul C. Taylor, MD, Patrick M. McCarthy, MD, Robert W. Stewart, MD, Eliot R. Rosenkranz, MD, and Delos M. Cosgrove III, MD

In Defense of Malpractice Charges: A Survey of the Legal Process 1356

James W. Pate, MD, and Jo Ann Cutting, JD

Effect of Advancing Age on Cost and Outcome of Coronary Artery Bypass Grafting 1362

Pamela S. Peigh, MD, Marc T. Swartz, BA, Kathy J. Vaca, RN, Douglas P. Lohmann, ME, and Keith S. Naunheim, MD

Cardiac Storage With UW Solution and Glucose 1368

Stephen E. Fremes, MD, Lin-Rui Guo, MD, Robert D. Furukawa, BS, Donald A. G. Mickle, MD, and Richard D. Weisel, MD

Systolic Arterial Pressure Recovery After Ventricular Fibrillation in Pigs 1374

Mehrdad M. R. Amirhamzeh, MD, Chao-Xiang Jia, MD, Woosup M. Park, AB, Marc L. Dickstein, MD, and Henry M. Spotnitz, MD

Surgical Treatment of Arrhythmogenic Right Ventricular Dysplasia: Long-Term Outcome 1380

Takuro Misaki, MD, Go Watanabe, MD, Takashi Iwa, MD, Makoto Tsubota, MD, Hiroshi Ohtake, MD, Keiichi Yamamoto, MD, and Yoh Watanabe, MD

Myocardial Protective Effect and Its Mechanism of Leukocyte-Depleted Reperfusion in Neonatal Rabbit Hearts 1386

Yoshiki Sawa, MD, Susumu Nakano, MD, Yasuhisa Shimazaki, MD, Motonobu Nishimura, MD, Tohru Kuratani, MD, and Hikaru Matsuda, MD

Cardiac Decompression After Operation for Congenital Heart Disease in Infancy 1392

Amir Elami, MD, Lester C. Permut, MD, Hillel Laks, MD, Davis C. Drinkwater, Jr, MD, and Jeffrey L. Sebastian, BS

Combined Aprotinin and Erythropoietin Use for Blood Conservation: Results With Jehovah's Witnesses 1397

Todd K. Rosengart, MD, Robert E. Helm, MD, John Klemperer, MD, Karl H. Krieger, MD, and O. Wayne Isom, MD

Blunt Diaphragmatic and Thoracic Aortic Rupture: An Emerging Injury Complex 1404

Sandro B. Rizoli, MD, Frederick D. Brenneman, MD, Bernard R. Boulanger, MD, and Robert Maggisano, MD

Thromboembolism After the Fontan Procedure and Its Modifications 1409

Marjan Jahangiri, FRCS, David B. Ross, FRCSC, Andrew N. Redington, FRCP, Christopher Lincoln, FRCS, and Elliot A. Shinebourne, FRCP

Neodymium:Yttrium-Aluminum-Garnet Laser for the Treatment of Tracheobronchial Recurrences in Esophageal Carcinomas 1415

Manson Fok, FRCSEd, Simon Y. K. Law, FRCSEd, and John Wong, PhD

Angioplasty Versus Coronary Artery Bypass in Octogenarians 1419

Tej K. Kaul, FRCS, Barry L. Fields, MD, David A. Wyatt, MD, Christopher R. Jones, MD, and Donald R. Kahn, MD

Protection by Coenzyme Q10 From Myocardial Reperfusion Injury During Coronary Artery Bypass Grafting 1427

Massimo Chello, MD, Pasquale Mastroroberto, MD, Rossana Romano, MD, Egidio Bevacqua, MD, Donato Pantaleo, MD, Raimondo Ascione, MD, Antonietta R. Marchese, MD, and Nicola Spampinato, MD

Bronchopleural Fistula After Pneumonectomy With a Hand Suture Technique 1433

Khaled Al-Kattan, FRCS, Leonardo Cattalani, MD, and Peter Goldstraw, FRCS

Esophagopleural Fistula: An Early and Long-Term Complication After Pneumonectomy 1437

Gilbert Massard, MD, Xavier Ducrocq, MD, Jean-Gustave Hentz, MD, Romain Kessler, MD, Pascal Dumont, MD, Jean-Marie Wihlm, MD, and Georges Morand, MD

Postoperative Cardiothoracic Infection: Diagnostic Value of Indium-111 White Blood Cell Imaging 1442

Elizabeth Oates, MD, and Douglas D. Payne, MD

Management of Non–Small Cell Lung Cancer With Direct Mediastinal Involvement 1447

Nael Martini, MD, Alon Yellin, MD, Robert J. Ginsberg, MD, Manjit S. Bains, MD, Michael E. Burt, MD, PhD, Patricia M. McCormack, MD, and Valerie W. Rusch, MD

Surgical Treatment of Bullous Emphysema: Experience With the Brompton Technique 1452

Samir S. Shah, MBBS, and Peter Goldstraw, FRCS

New Composite Graft Repair for Patients With and Without Marfan's Syndrome 1457

Akio Suzuki, MD, PhD, Jun Amano, MD, PhD, Makoto Sunamori, MD, PhD, Tohru Sakamoto, MD, PhD, and Hiroyuki Tanaka, MD, PhD

Total Arch Graft Replacement in Patients With Acute Type A Aortic Dissection 1462

Teruhisa Kazui, MD, Nozomu Kimura, MD, Osamu Yamada, MD, and Sakuzo Komatsu, MD

Aortic Root Replacement With a Composite Graft: Results of 69 Operations in 66 Patients 1469

Shigeaki Aoyagi, MD, Kenichi Kosuga, MD, Hidetoshi Akashi, MD, Atsushige Oryoji, MD, and Kiroku Oishi, MD

Vascular Complications Related to Percutaneous Insertion of Intraaortic Balloon Pumps 1476

M. Kamil Göl, MD, Murat Bayazit, MD, Mustafa Emir, MD, Oğuz Taşdemir, MD, and Kemal Bayazit, MD

Ischemic Preconditioning Improves Preservation With Crystalloid Cardioplegia 1481

Richard W. Illes, MD, J. Keith Wright, BA, Karen Inners-McBride, BS, Chun-Jie Yang, MD, and Adrian Tristan

Transesophageal Echocardiographic Measurements of Cardiac Output in Cardiac Surgical Patients 1486

Mohammad Bashar Izzat, FRCS, Idriss A. Regragui, FRCS, Peter Wilde, FRCR, Gianni D. Angelini, FRCS, and Alan J. Bryan, FRCS

Operation for Ventricular Tachyarrhythmias: Refining Current Treatment Strategies 1490

James J. Morris, MD, Amita Rastogi, MD, Marshall S. Stanton, MD, Bernard J. Gersh, MD, Stephen C. Hammill, MD, and Hartzell V. Schaff, MD

Coronary Sinus Pressure and Arterial Venting Do Not Affect Retrograde Cardioplegia Distribution 1499

Alice H. Huang, PhD, Ifeolumipo O. Sofola, MD, Bradley L. Bufkin, MD, Richard J. Mellitt, MD, and Robert A. Guyton, MD

Orthotopic Heart Transplantation With Bicaval and Pulmonary Venous Anastomoses 1505

Carlos Blanche, MD, Mario Valenza, MD, Lawrence S. C. Czer, MD, Peter Barath, MD, Dan Admon, MD, Deborah Harasty, RN, Caron Utley, RN, Dov Freimark, MD, Ivan Aleksic, MD, Jack Matloff, MD, and Alfredo Trento, MD

Conversion of Atriopulmonary to Cavopulmonary Anastomosis in Management of Late Arrhythmias and Atrial Thrombosis 1510

Jane M. Kao, MD, Juan C. Alejos, MD, Peter W. Grant, MD, Roberta G. Williams, MD, Kevin M. Shannon, MD, and Hillel Laks, MD

Potential of Left Ventricular Assist Devices as Outpatient Therapy While Awaiting Transplantation 1515

Howard R. Levin, MD, Jonathan M. Chen, MD, Mehmet C. Oz, MD, Katharine A. Catanese, RN, Henry Krum, MD, PhD, Rochelle L. Goldsmith, PhD, Milton Packer, MD, and Eric A. Rose, MD

Case Reports

Successful Surgical Treatment of a Coronary Artery Mycotic Aneurysm 1521

Afksendiyos Kalangos, MD, Pierre L. Julia, MD, Azmi Ozler, MD, Victor A. Jebara, MD, Jean-Noel Fabiani, MD, and Ozge Sezerman, MD

Salvage of Colon Interposition by Antethoracic Free Jejunal Transfer 1523

Grant W. Carlson, MD, Timothy M. Anderson, MD, John R. Galloway, MD, and Kamal A. Mansour, MD

Hemangiopericytoma of the Mediastinum Causing Spontaneous Hemothorax 1525

Masatoshi Mori, MD, Norihiko Nakanishi, MD, and Keizo Furuya, MD

Disruption of Sutured Pulmonary Valve in Fontan Operation 1527

Francis X. Downey, MD, Serafin Y. DeLeon, MD, David O. Monson, MD, Norbert E. Baumgartner, MD, Robert C. Lichtenberg, MD, Henry J. Sullivan, MD, and Roque Pifarré, MD

One-Stage Repair of Aortopulmonary Septal Defect and Interrupted Aortic Arch 1529

Ing-Sh Chiu, MD, PhD, Jou-Kou Wang, MD, PhD, Ming-Jiuh Wang, MD, and Chen-Chi Wang, MD

Successful Use of Deep Hypothermic Circulatory Arrest in Pregnancy 1532

Enio Buffolo, MD, J. Honório Palma, MD, Walter J. Gomes, MD, Hermínio Vega, MD, Daniel Born, MD, Antonio F. Moron, MD, and Antonio C. Carvalho, MD

Lipothymoma With Red Cell Aplasia, Hypogammaglobulinemia, and Lichen Planus 1534

Kieran G. McManus, MD, Mark S. Allen, MD, Victor F. Trastek, MD, Claude Deschamps, MD, Thomas B. Crotty, MD, and Peter C. Pairolero, MD

Thoracotomy for Repair of Left Ventricular Aneurysm in a Patient With Patent Coronary Bypass Grafts 1536

Oz M. Shapira, MD, Gabriel S. Aldea, MD, Thomas G. Carr, Jr, MD, and Richard J. Shemin, MD

Coronary Artery Bypass Grafting After Pneumonectomy 1538

Luis D. Berrizbeitia, MD, William A. Anderson, MD, Glenn W. Laub, MD, and Lynn B. McGrath, MD

Cardiac Valvular Chondroma 1540

James G. Dralle, MD, Dinesh Jain, MD, Ponnambalam Sundram, MD, and Robert L. Replogle, MD

Computed Tomography-Guided Coil Injection and Thoracoscopic Pulmonary Resection Under Roentgenographic Fluoroscopy 1542

Hisao Asamura, MD, Haruhiko Kondo, MD, Tsuguo Naruke, MD, Ryosuke Tsuchiya, MD, Fumihiko Wakao, MD, Masahiro Kaneko, MD, and Keiichi Suemasu, MD

Cardiac Hemangiopericytoma Growing in the Left Atrium 1544

Masakatsu Ohtani, MD, Kenji Ohnishi, MD, Hiroshi Imagawa, MD, Masaaki Kato, MD, Yasuhiko Yoshioka, MD, Kazuaki Kumagai, MD, and Tokutake Houki, MD

How to Do It

Ambulatory Intraaortic Balloon Counterpulsation 1547

Scott A. Buchanan, MD, Scott E. Langenburg, MD, Michael C. Mauney, MD, Lorne H. Blackbourne, MD, Mark A. Groh, MD, James D. Bergin, MD, and Curtis G. Tribble, MD

A Strategy for Proximal Arterial Anastomosis 1550

Timothy S. Hall, MD

Current Review

Surgical Treatment for Cardiac Rhabdomyomas in Children 1552

Jeffrey P. Jacobs, MD, Anastasios K. Konstantakos, BS, Fred W. Holland II, MD, Kenneth Herskowitz, MD, Peter L. Ferrer, MD, and Richard A. Perryman, MD

Key References

Biostatistics and Clinical Trials Articles for Thoracic Surgery 1556

Steven Piantadosi, MD, PhD

Update

Maximal Oxygenation of Dilute Blood Cardioplegic Solution 1558

William G. Hendren, MD, Dennis D. O'Keefe, MD, Gillian A. Geffin, MB, BS, Alvin G. Denenberg, MS, Tim R. Love, MD, and Willard M. Daggett, MD

Correspondence

Technique to Reduce Air Leaks After the Resection of Emphysematous Lung 1560

Joseph D. Whitlark, MD, and Hwei-Kang Hsu, MD

Pall Leukocyte Depleting Filter During Cardiopulmonary Bypass 1560

Simon M. Allen, FRCS, Dominic Pagano, FRCS, and Robert S. Bonser, FRCS

Reply

Khalid E. Al-Ebrahim, FRCSC, and Hussein Shafei, FRCS/CTh

Biopsy-Induced Tricuspid Regurgitation: Anatomic Considerations 1561

Solomon Victor, FRCP, and Vijaya M. Nayak, MS

Reply

Charles B. Huddleston, MD

Chordal Preservation During Mitral Valve Replacement 1563

Norman P. Briffa, FRCS, and Francis C. Wells, FRCS

Reply

Eric A. Rose, MD, and Mehmet C. Oz, MD

Simple Internal Mammary Artery Retractor 1563

Joseph S. McLaughlin, MD

Balloon Valvuloplasty and Operative Treatment of Mitral Stenosis 1564

Ratna Magotra, MS

Reply

Donald D. Glower, MD, J. Kevin Harrison, MD, and Thomas M. Bashore, MD

Congenital Factor XII Deficiency and Cardiopulmonary Bypass 1565

Michael K. Wood, MD

The Ross Procedure: To Do or Not to Do 1565

Richard J. Hurvitz, MD

Management of Cold Agglutinemia Using Normothermic Intermittent Fibrillatory Arrest 1566

Adarsh Subrahmanyam Koppula, MCh, Byalal Raghavendra Jagannath, MNAMS, Apoorva Shashikant Kanhere, MCh, Mrinalendu Das, MCh, and C. Mallikarjuna Gupta, MCh

Atrial Pacing and Intraaortic Balloon Counterpulsation 1566

Andrew J. Duncan, FRCS, and Brian Prendergast, FRCS

A Method to Facilitate Subxiphoid Pericardiotomy 1567

Otoni M. Gomes, MD, PhD

Reply

Barbara K. Temeck, MD, and Harvey I. Pass, MD

Leukocyte Depletion Reduces Postoperative Oxygen Requirements 1567

S. Michael Coleman, MD, and Lynette Demastrie, CRT

Reply

David P. Taggart, MD(Hons)

Vascularized Muscle Flaps in Children 1568

Richard S. Stahl, MD, and Gary S. Kopf, MD

Reply

Carl L. Backer, MD, Jay M. Pensler, MD, and Constantine Mavroudis, MD

Lymph Node Mapping of Esophageal Cancer 1569

Alan G. Casson, FRCSC, Valerie W. Rusch, MD, Robert J. Ginsberg, MD, Natalie Zankowicz, RN, and Richard J. Finley, MD

Announcements

Information for Authors A-39, 40

Guidelines for the Submission of Electronic Manuscripts A-41

Events of Interest A-42, 43

Forthcoming Articles A-44

Notice From The Society of Thoracic Surgeons 1342

Notice From the American Board of Thoracic Surgery 1475, 1546

Classified Advertisements A-45, 46, 47

Index to Advertisers A-49

Number 6 December 1994

Editorials

An Impending Crisis Involving Biomaterials 1571

J. Donald Hill, MD

ICDs, VT, VF, and the AATS and STS 1572

Alden H. Harken, MD, and James L. Cox, MD

Honorary Member

Acceptance of Honorary Membership 1573

Harris B. Shumacker, Jr, MD

Original Articles

Evolution of Treatment Strategies for Adenocarcinoma of the Esophagus and Gastroesophageal Junction 1574

Cameron D. Wright, MD, Douglas J. Mathisen, MD, John C. Wain, MD, Hermes C. Grillo, MD, Alan D. Hilgenberg, MD, Ashby C. Moncure, MD, Robert W. Carey, MD, Noah C. Choi, MD, Mary Daly, and Diana L. Logan, RN

Metaanalysis of Prophylactic Drug Treatment in the Prevention of Postoperative Bleeding 1580

Stephen E. Fremes, MD, Bill I. Wong, MD, Eileen Lee, MSc, Ryan Mai, George T. Christakis, MD, Richard F. McLean, MD, Bernard S. Goldman, MD, and C. David Naylor, MD

Warm Blood Cardioplegic Induction: An Underused Modality 1589

Hanafy M. Hanafy, MD, Bradley S. Allen, MD, Jacqueline W. Winkelmann, BS, Jongwok Ham, BS, Daniel Osimani, MD, and Renee S. Hartz, MD

VATS Increases Costs in Patients Undergoing Lung Biopsy for Interstitial Lung Disease 1595

Lisa J. Molin, BS, John B. Steinberg, MD, and Louis A. Lanza, MD

Pulmonary Resection for Metastatic Breast Cancer 1599

Monica L. McDonald, MD, Claude Deschamps, MD, Duane M. Ilstrup, MS, Mark S. Allen, MD, Victor F. Trastek, MD, and Peter C. Pairolero, MD

Damus-Kaye-Stansel Procedure: Midterm Follow-up and Technical Considerations 1603

Thomas L. Carter, MD, Richard D. Mainwaring, MD, and John J. Lamberti, MD

One-Incision Approach for Insertion of Implantable Cardioverter Defibrillators 1609

Andreas Markewitz, MD, Hans Kaulbach, MD, Sören Mattke, MD, Uwe Dorwarth, MD, Christian Weinhold, MD, Ellen Hoffmann, MD, Gerhard Steinbeck, MD, and Bruno Reichart, MD

Single-Incision Implantation of Cardioverter Defibrillators Using Nonthoracotomy Lead Systems 1614

Dieter Hammel, MD, Michael Block, MD, Armin Geiger, MD, Dirk Böcker, MD, Thomas Stadlbauer, MD, Günter Breithardt, MD, and Hans H. Scheld, MD

Small Aortic Root in Childhood: Surgical Options 1617

David B. Ross, MD, George A. Trusler, MD, John G. Coles, MD, Ivan M. Rebeyka, MD, Jeffrey Smallhorn, MD, William G. Williams, MD, and Robert M. Freedom, MD

Prediction of Postoperative Exercise Tolerance After Aortic Valve Replacement 1626

Kazunobu Hirooka, MD, Kouhei Kawazoe, MD, Yoshio Kosakai, MD, Yoshikado Sasako, MD, Kiyoyuki Eishi, MD, Yoshitsugu Kito, MD, Norifumi Nakanishi, MD, Takao Yoshioka, MD, and Yasunaru Kawashima, MD

Effect of Pinacidil on Rat Hearts Undergoing Hypothermic Cardioplegia 1631

Hiroshi Hosoda, MD, Makoto Sunamori, MD, and Akio Suzuki, MD

Adenosine in Blood Cardioplegia Prevents Postischemic Dysfunction in Ischemically Injured Hearts 1637

Dudley A. Hudspeth, MD, Katsuhiko Nakanishi, MD, Jakob Vinten-Johansen, PhD, Zhi-Qing Zhao, MD, PhD, D. Scott McGee, BS, Mark W. Williams, BS, and John W. Hammon, Jr, MD

Decreasing Myocardial pH Reflects Ischemia During Continuous Warm Retrograde Cardioplegic Arrest 1645

Russell F. Stahl, MD, Babs R. Soller, PhD, Charles Hsi, MD, Janice BelleIsle, BS, and Thomas J. Vander Salm, MD

Study of Efficacies of Leukocyte-Depleted Terminal Blood Cardioplegia in 24-Hour Preserved Hearts 1651

Norihide Fukushima, MD, Ryota Shirakura, MD, Seizou Nakata, MD, Mitsunori Kaneko, MD, Shuji Miyagawa, MD, Yoshifumi Naka, MD, Jou-Chen Chang, MD, Goro Matsumiya, MD, Susumu Nakano, MD, and Hikaru Matsuda, MD

Efficacy of Topical Cooling in Lung Preservation: Is a Reappraisal Due? 1657

Stig Steen, MD, PhD, Trygve Sjöberg, PhD, Richard Ingemansson, MD, and Lars Lindberg, MD

Orthotopic Heart Transplantation in Children With Congenital Heart Disease 1664

Steven A. Webber, MBChB, F. Jay Fricker, MD, Marian Michaels, MD, Ruth M. Pickering, PhD, Pedro J. del Nido, MD, Bartley P. Griffith, MD, and John M. Armitage, MD

Regression of Left Ventricular Mass After Mitral Valve Repair of Pure Mitral Regurgitation 1670

Kou-Gi Shyu, MD, Jin-Jer Chen, MD, Fang-Yue Lin, MD, PhD, Chang-Her Tsai, MD, Jiunn-Lee Lin, MD, PhD, Yung-Zu Tseng, MD, and Wen-Pin Lien, MD

Magnesium Flux Caused by Coronary Artery Bypass Operation: Three Patterns of Deficiency 1674

Christopher M. R. Satur, FRCS, John R. Anderson, FRCS, Alison Jennings, MPhil, Kenneth Newton, MSc, Paul G. Martin, PhD, Unikrishnan Nair, FRCS, and Duncan R. Walker, FRCS

Videothoracoscopic Excision of Mediastinal Masses: Indications and Technique 1679

Giancarlo Roviaro, MD, Carlo Rebuffat, MD, Federico Varoli, MD, Contardo Vergani, MD, Marco Maciocco, MD, and Silvio Marco Scalambra, MD

Evaluation of CGP 39393 as the Anticoagulant in Cardiopulmonary Bypass Operation in a Dog Model 1685

Jeanine M. Walenga, PhD, Michael J. Koza, BS, Soon J. Park, MD, Mark R. Terrell, MD, and Roque Pifarré, MD

Is There a Place for Cold Crystalloid Cardioplegia in the 1990s? 1690

Paul J. Hendry, MD, Roy G. Masters, MD, and Anne Haspect, RN

Thoracoscopic Management of Effusive Pericardial Disease: Indications and Technique 1695

Hui-Ping Liu, MD, Chau-Hsiung Chang, MD, Pyng Jing Lin, MD, Hung-Chang Hsieh, MD, Jen-Ping Chang, MD, and Ming-Jang Hsieh, MD

Mediastinoscopic Treatment of Mediastinal Cysts 1698

John D. Urschel, MD, and Thomas A. Horan, MD

Jugular Bulb Saturation and Cognitive Dysfunction After Cardiopulmonary Bypass 1702

Narda D. Croughwell, CRNA, Mark F. Newman, MD, James A. Blumenthal, PhD, William D. White, MPH, Julia B. Lewis, BSN, Peter E. Frasco, MD, Lloyd R. Smith, PhD, Elizabeth A. Thyrum, PhD, Barrie J. Hurwitz, MD, Bruce J. Leone, MD, Randall M. Schell, MD, and Joseph G. Reves, MD

Respiratory Responses to CO_2 Rebreathing in Lung Transplant Recipients 1709

Gregory D. Trachiotis, MD, Simon R. Knight, MD, Mindy Hann, BSN, Mary S. Pohl, BSN, G. Alexander Patterson, MD, Joel D. Cooper, MD, and Elbert P. Trulock, MD

Tidal Volume and Respiratory Rate Changes During CO_2 Rebreathing After Lung Transplantation 1718

Gregory D. Trachiotis, MD, Simon R. Knight, MD, Mary S. Pohl, BSN, G. Alexander Patterson, MD, Joel D. Cooper, MD, and Elbert P. Trulock, MD

Thromboembolic Risk and Late Survival After Mitral Valve Replacement With the St. Jude Medical Valve 1721

Olivier Jegaden, MD, Armand Eker, MD, François Delahaye, MD, Pietro Montagna, MD, Jean Ossette, MD, Guy Durand de Gevigney, MD, and Philippe H. Mikaeloff, MD

Coronary Artery Bypass Grafting in Patients With Dialysis-Dependent Renal Failure 1729

Clarence H. Owen, MD, Robin G. Cummings, MD, Timothy L. Sell, MD, Steve J. Schwab, MD, Robert H. Jones, MD, and Donald D. Glower, MD

Effect of Lung Inflation and Sternotomy Direction on Pleural Space Violation 1734

Samuel V. Lichtenstein, MD, PhD, James G. Abel, MD, Robert T. Miyagishima, MD, Hilton Ling, MD, C. Brian Warriner, MD, Moira E. Stilwell, MD, and Christopher R. Thompson, MD

Preoperative Evaluation of Stage I and Stage II Non–Small Cell Lung Cancer 1738

Jeffrey Hatter, MD, Leslie J. Kohman, MD, Ralph S. Mosca, MD, Stephen L. Graziano, MD, Linda J. Veit, BS, and Mary Coleman, MPA

Fast-Track Recovery of the Coronary Bypass Patient 1742

Richard M. Engelman, MD, John A. Rousou, MD, Joseph E. Flack III, MD, David W. Deaton, MD, Chester B. Humphrey, MD, Lee H. Ellison, MD, Philip D. Allmendinger, MD, Susannah G. Owen, AB, and Penelope S. Pekow, PhD

Case Reports

Aortic Valve Replacement After a Bentall Procedure 1747

Thomas G. Sharp, MD, Stephen Sawada, MD, and Colin Bailey, MD

Removal of a Bullet From the Right Heart Using Controlled Embolization to a Peripheral Vein 1748

Dragan P. Pecirep, MD, and Henry R. Hopkins, MD

Side-to-Side Carotid-Subclavian Anastomosis for Interrupted Aortic Arch 1750

Renato A. K. Kalil, MD, Raul I. Rossi Filho, MD, Paulo Roberto Prates, MD, João R. M. Sant'Anna, MD, Fernando A. Lucchese, MD, and Ivo A. Nesralla, MD

Aortic Sarcoma Four Years After Dacron Graft Insertion 1752

Billie S. Fyfe, MD, Cid S. Quintana, MD, Mamoru Kaneko, MD, and Randall B. Griepp, MD

Successful Plication for Postoperative Diaphragmatic Paralysis in an Adult 1754

Lawrence R. Glassman, MD, Frank C. Spencer, MD, F. Gregory Baumann, PhD, Francis V. Adams, MD, and Stephen B. Colvin, MD

Plication of Paralyzed Hemidiaphragm After Right Sleeve Pneumonectomy 1755

Shin-ichi Takeda, MD, Kazuya Nakahara, MD, Yoshitaka Fujii, MD, Masato Minami, MD, and Hikaru Matsuda, MD

Atypical Presentation of Spontaneous Pneumomediastinum 1758

Anthony C. Ralph-Edwards, MD, and F. Griffith Pearson, MD

Postoperative Intramyocardial Abscess Caused by Mucormycosis 1760

Jorge M. Balaguer, MD, Enrique Soto, MD, Donna Perry, NP, and John M. Moran, MD

Removal of an Infected Right Atrial Mass in a Patient With Sickle Cell Disease 1762

William D. Spotnitz, MD, John M. Dent, MD, Paul D. Mintz, MD, Nicholette L. Erickson, MD, Robert E. Fechner, MD, and Mark A. Groh, MD

Heparin-Induced Thrombocytopenia and Thrombosis: Presentation After Cardiopulmonary Bypass 1764

Ravi Munver, BS, Ira C. Schulman, MD, David J. Wolf, MD, and Todd K. Rosengart, MD

Embolectomy of a Bird's Nest Vena Caval Filter 1766

W. Randolph Chitwood, Jr, MD, Karl S. Chiang, MD, J. Mark Williams, MD, Richard S. Zeri, MD, and Diane A. Semer, MD

Heart Transplantation for Q Fever Endocarditis 1768

Carlos Blanche, MD, Dov Freimark, MD, Mario Valenza, MD, Lawrence S. C. Czer, MD, and Alfredo Trento, MD

How to Do It

Operative Considerations in Implantation of the Perma-Flow Graft 1770

Robert W. Emery, MD, Lyle D. Joyce, MD, PhD, Kit V. Arom, MD, PhD, R. Michael King, MD, and Demétre M. Nicoloff, MD, PhD

Current Review

Chest Wall Neoplasms and Their Management 1774

Benjamin O. Anderson, MD, and Michael E. Burt, MD, PhD

Update

Extrapleural Pneumonectomy for Diffuse, Malignant Mesothelioma 1782

L. Penfield Faber, MD

Correspondence

Vertical Muscle-Sparing Thoracotomy 1784

Jaroslav Stark, MD

Pacemaker Failure Due to Pocket Emphysema 1784

Arthur S. Palmer, MD

Dextran 40 at 2% Versus 5% in Low-Potassium Solutions: Which Is Best? 1784

Lorenzo Spaggiari, MD, and Paolo Bobbio, MD

Reply

Stig Steen, MD, PhD

Portable Cardiopulmonary Bypass: Resuscitation From Prolonged Ice-Water Submersion and Asystole 1786

Herwig Antretter, MD, Otto E. Dapunt, MD, and Ludwig C. Mueller, MD

Percutaneous Cardiopulmonary Bypass for Hypothermic Cardiac Arrest 1787

Arun P. Mehra, MCh, John J. M. Black, FRCS, Chris Aps, FFARCS, Graham E. Venn, FRCS, and Bryn T. Williams, FRCS

Reply

Daniel J. Waters, DO, and Michael Belz, CCP

Stroke Prevention and Carotid Artery Disease in Cardiac Surgical Patients 1788

Raoul Borioni, MD, Mariano Garofalo, MD, Antonio Pellegrino, MD, Guglielmo M. Actis Dato, MD, and Luigi Chiariello, MD

Reply

Thomas H. Wareing, MD

Predictors of Conduction Disturbances After Coronary Bypass Grafting 1789

Joseph E. Flack III, MD

Use of Internal Mammary Artery for Emergency Grafting After Failed Coronary Angioplasty 1789

Luc Noyez, MD, Gilles L. Kaan, MD, and Leon K. Lacquet, MD

Reply

Frank L. Caes, MD, and Guido J. Van Nooten, MD

Heparin-Coated Materials Limit the Shear Stress-Induced Leukocytosis After Cardiopulmonary Bypass 1790

Marco Ranucci, MD

Reply

Y. J. Gu, MD, PhD, and Willem van Oeveren, PhD

Intramural Coronary Artery in Transposition of the Great Arteries 1792

Stephen P. Sanders, MD, and Luciano Pasquini, MD

Reply

Tom R. Karl, MD

Emergency Modified Cabrol Procedure for Tracheobronchial Compression 1792

Yasushi Terada, MD, Toshio Mitsui, MD, Tomoaki Jikuya, MD, Masato Sato, MD, Kanji Matsuzaki, MD, and Shinya Kanemoto, MD

The Vineberg Procedure 1793

Bernard S. Goldman, MD

Reply

Joseph B. Shrager, MD

Review of Recent Books

Pediatric Thoracic Surgery, edited by James C. Fallis, Robert M. Filler, and Georges LeMoine 1684

Marleta Reynolds, MD

Atlas of Thoracoscopic Surgery, by Mark J. Krasna, MD, and Michael J. Mack, MD 1783

Thomas W. Rice, MD

SYMPOSIUM: USING OUTCOMES DATA TO IMPROVE CLINICAL PRACTICE

Using Outcomes Data to Improve Clinical Practice: Building on Models from Cardiac Surgery 1807

Using Outcomes Data to Improve Clinical Practice: What We Have Learned 1809

Karl E. Hammermeister, MD, Jennifer Daley, MD, and Frederick L. Grover, MD

The Importance of Data in Improving Practice: Effective Clinical Use of Outcomes Data 1812

Paul A. Ebert, MD

Participatory Continuous Improvement 1815

Karl E. Hammermeister, MD

Using Risk-Adjusted Outcomes to Assess Clinical Practice: An Overview of Issues Pertaining to Risk Adjustment 1822

Lisa I. Iezzoni, MD

Criteria by Which to Evaluate Risk-Adjusted Outcomes Programs in Cardiac Surgery 1827

Jennifer Daley, MD

Approaches to Predictive Modeling 1836

Paul M. Steen, MD

Practical Considerations in the Management of Large Multiinstitutional Databases 1841

Fred H. Edwards, MD, Richard E. Clark, MD, and Marc Schwartz, BS

The Veterans Affairs Continuous Improvement in Cardiac Surgery Study 1845

Frederick L. Grover, MD, Randall R. Johnson, MS, A. Laurie W. Shroyer, PhD, Guillermo Marshall, PhD, and Karl E. Hammermeister, MD

New York State's Cardiac Surgery Reporting System: Four Years Later 1852

Edward L. Hannan, PhD, Dinesh Kumar, MS, Michael Racz, MA, Albert L. Siu, MD, and Mark R. Chassin, MD

HCFA's Health Care Quality Improvement Program and the Cooperative Cardiovascular Project 1858

Stephen F. Jencks, MD

Profile of Preoperative Characteristics of Patients Having CABG Over the Past Decade 1863

Richard E. Clark, MD, Fred H. Edwards, MD, and Marc Schwartz, BS

Playing by the Numbers: How Collecting Outcomes Data Changed My Life 1866
William C. Nugent, MD, and William C. Schults

How a New York Cardiac Surgery Program Uses Outcomes Data 1871
Stanley W. Dziuban, Jr, MD, Joseph B. McIlduff, MD, Stuart J. Miller, MD, and Richard H. Dal Col, MD

Provider Perceptions in Using Outcomes Data to Improve Clinical Practice 1877
A. Laurie W. Shroyer, PhD, Ira Dauber, MD, Robert H. Jones, MD, Jennifer Daley, MD, Frederick L. Grover, MD, and Karl E. Hammermeister, MD

The Role of Outcomes Data in Health Care Reform 1881
Galen Barbour, MD

Announcements

Information for Authors A-43, 44
Guidelines for the Submission of Electronic Manuscripts A-45
Events of Interest A-46, 47
Forthcoming Articles A-49
The Society of Thoracic Surgeons: Thirty-first Annual Meeting 1608
Notice From the American Board of Thoracic Surgery 1625, 1773
Apology 1794
Thirty-first Annual Meeting of The Society of Thoracic Surgeons 1795
Twenty-eighth Postgraduate Program, The Society of Thoracic Surgeons 1796
Program for the Thirty-first Annual Meeting of The Society of Thoracic Surgeons 1797
Classified Advertisements A-51, 52, 53
Index to Advertisers A-54

Index to Volume 58

Author Index 1885
Subject Index 1913